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THE NEW MODEL CLAUSES FOR TOWN-PLANNING SCHEMES

FOLLOWING on the Town-Planning Act of 1925, which consolidated the law with regard to town planning, the Ministry of Health have now issued a revised series of model clauses for use in the preparation of town-planning schemes.

The new model clauses follow closely on the lines of the series issued in 1923, with the revisions that have been necessitated by recent experience and the passing of the all-important Roads Improvement Act, 1925, and Public Health Act, 1925. The old clause providing for safety of traffic by the regulation of the height of fences and walls and the removal of obstructions in the sight line, especially near corners, is now embodied in the Roads Improvement Act, and consequently disappears from the town-planning clauses.

The right of appeal by owners to the Ministry of Health now becomes, not a right of appeal, but a right "to apply for leave to appeal," the only appeals expressly given with regard to streets being those relating to a Local Authority's requirements as to private streets dedicated by owners. In the Explanatory Memorandum the Ministry naïvely says: "It is thought right that a prospective appellant should obtain leave to appeal before doing so, in order that the Minister may have power to refuse to entertain appeals which are obviously frivolous or clearly unjustified." Where leave is granted the application may, however, itself be accepted as an appeal, and delay thus avoided.

The density standards of twelve, eight, or six houses to the acre are now being generally recognised, the number varying according to the character of the locality. The Ministry reiterate that great caution should be exercised in imposing low densities; these must be in the public as well as the owners' interest, and care must be taken to avoid any possible risk of checking the development of the land concerned. Provision has been made for a reasonable relaxation of the prescribed density standards, where necessary, in the case of land or streets laid out prior to the scheme or held in limited amounts at that date.

The principal applications of the clauses are those affecting street construction. The Local Authority may declare any land coloured pink on the map to be "a street," after giving three months' notice of their intention to the persons interested in the land. They also have power to declare which streets shall be deemed to be highways repairable by the inhabitants at large and others which shall be deemed to be "private streets," of which the cost of construction shall fall on the owners. Not only may the Council declare a site as reserved for a "private street," but they may also similarly declare any adjoining land belonging to them and required for incidental works, such as an embankment, as a part of the private street.

An important clause lays down that if it appears to the Council at any time that a new street or the widening of an existing highway is needed, although not specially marked on the map, they may make an order, with the approval of the Minister, declaring that the land shall be reserved for streets.

Clauses for the protection of the frontager have, however, been introduced, to deal with the case of widenings, and the frontager can only be called upon to pay for the making-up of the extra width to bring the width of the street up to that of a "standard street," or, in other words, the by-law width. Account has also to be taken, in making an apportionment against any premises, of the amount and value of any existing works on the highway, whether done by the owner or not.

The schedule attached to the model clauses sets up a minimum width of 36 ft. for a street required for through traffic, with a carriageway of not less than 24 ft.

For streets not likely to be required for through traffic, the schedule suggests that up to 1,500 ft. in length a street need only be 36 ft. between the fences with a carriageway of only 16 ft. Even with occasional turning spaces, a *cul-de-sac* street of this length is likely to prove somewhat inconvenient in these days of universal motor traffic, and the schedule may well be modified in practice by Local Authorities adopting these otherwise excellent clauses. The furniture van and the delivery lorry cannot, however, be overlooked.

The attraction of our streets depends to no small extent on the grass and verdure surrounding them, and it is interesting to note that one of the model clauses lays down that when the Council execute street works upon the site of any "declared street," they *shall* plant with grass, trees or shrubs, *or treat in other suitable manner*, any part of the street not constructed as carriageway or footway. What the method may be which is covered by "other suitable manner" is left indefinite, but the effect is obviously to allow the Council a good deal of latitude in dealing with the amenities of the street.

An interesting conundrum which arises in connection with the saving clause as to "ancient monuments and other objects of archæological interest" is if they are to be compulsorily excluded from the town-planning scheme, how can they best be saved even by an Authority most anxious to save them?

Railways are still excluded from the operations of town planning, and it is, of course, only reasonable that the transit needs of the country as a whole shall take precedence over merely local planning. The time is, however, rapidly approaching when we must take stock of our railways and their tracks. Many railway lines, built under the stress of competition to duplicate some other line, are already falling out of use or no longer needed for railway purposes, and in the national planning which must come in the near future it should be possible to re-use these tracks in some other way to the greater service of the community.

Some little simplification of procedure has been effected, such as the omission of public advertisement in the case of supplementary zoning, but there is apparently no sign as yet of getting rid of the burdensome process of referencing and serving notice on every individual owner in the area of the scheme, whether or not he is directly affected. This matter, small as it may seem, tends to keep schemes down to the bare minimum in area, and in a subject where vision of the widest kind is essential, anything that can be done, subject to proper safeguards, to simplify procedure and expedite progress should be heartily welcomed.

Clauses, after all, tend to be restrictive rather than constructive, and the aim of all interested in town planning should be to make the town plan itself a living, vital force in the steady improvement of the town. The clauses must, however, form the specification under which the great edifice itself will be erected. Standardisation of form and idea is most valuable so far as detail is concerned, but it is essential that the greatness of a plan should not be ruined by its "standard streets."

NOTES

City Churches.

SIR REGINALD BLOMFIELD, in a letter to *The Times*, disposes clearly of the supposed safeguard against City churches' destruction which might come from the advice of the Fine Arts Commission. He points out that it would have the barest minimum of power and that it would probably prove quite ineffective in saving any of the doomed churches. The Earl of Crawford pronounces very strongly against the Union of Benefices Bill. He avers that the measure is essentially one to destroy City churches. He countered the argument against the retention of many churches in such close proximity to each other by asking whether we had too many masterpieces in the National Gallery or the British Museum. He is quite right in assuming that public opinion has changed, and has developed a belief in the value of our beautiful and historic monuments and buildings. It is only too true that if we were to allow the dominant factor in our development of London to be an economic and material one, there would soon be little left of our beautiful heritages from the past.

The Bridges Commission.

SOME feeling of surprise will undoubtedly be felt as to the choice of those who are to act as the Royal Commission on Bridges. We may perhaps suppose it was considered advisable to appoint a Commission which should be able to judge the problem from as detached and impartial a point of view as possible. One might have expected to find at least one practising architect and one acknowledged authority on town planning amongst the members of the Commission, for though it is nominally a Commission on Bridges, it is imperative, if its findings are to be statesmanlike and of real value, that the direction of traffic and the design of town planning must count for much in the right conclusions. It has been said that little or no good ever came of Royal Commissions, but if the recommendations of this Bridges Commission are to be carried out, one can hardly imagine a more serious responsibility than that which attaches to it.

The Vital Issues.

SINCE the scheme of the St. Paul's bridge was first mooted great changes have occurred, and one of a serious kind is the alarm as to the safety of St. Paul's Cathedral. The increase of vibration from continued and heavy traffic can hardly be ignored. As we have so frequently pointed out, London suffers from the lack of a supreme controlling authority, and its future is hampered by the traditions, prejudices, and one-sided views of many important interests. The discussion of the London Society Committee led to the conclusion that the railway problem loomed large in the foreground, and that until the future development of railways is finally agreed upon, there is little hope of a properly considered development of the city. Are we to take for granted that steam trains are for ever to cross the river, that fixed tram lines are always to remain, that the present state of thoroughfares on the south side is to drift along hopelessly, that the derelict mudbanks on the south side are never to give way to a fine southern embankment, and that no determined policy is to be decided upon which shall adequately unite the north and south sides of the river?

Good Guidance.

No Royal Commission ever had a more serious problem to face, and we can only hope that expert evidence of the best kind will be called in to assist its deliberations.

Charing Cross and St. Paul's Bridges.

ALL sorts of hasty or unfair assumptions have been laid down by those who argue for specific solutions of our river problem, and all it involves, and it has been maintained by many that the ultimate cost of a new Charing Cross Road bridge has been grossly exaggerated. It is surely open to question whether the vastly increased values of property on sites newly opened out by a well-considered Charing Cross bridge scheme would not go a long way towards recoupment. We were told the other day that it is considered the value of the property acquired for the St. Paul's bridge scheme has already much increased.

Building Relations in France.

A CORRESPONDENT recently in France writes: "New and mammoth hotels are springing up in Le Touquet in order to accommodate the increasing tide of visitors. It is interesting to com-

From a Pencil Sketch by MR. A. C. FARE.

pare the progress made in the erection of the Westminster Hotel there, which contains many hundreds of bedrooms, with that of the new hotels along Piccadilly. The first part of the Westminster was built and completed during one winter season, and the second part will be completed in six months. The builders in this part of France work eleven or twelve hours a day. There are no Saturday afternoon holidays, and I saw many men at work both on the hotels and houses on Sunday afternoons. The rate of payment is 3 francs an hour, except for masons and cement workers, who receive special piecework rates. At the present exchange, 3 francs an hour is less than 3d. in English money. No strikes have ever been heard of in Le Touquet. I was privileged to attend a luncheon given by one of the principal building contractors, M. Pentier, who was made last June an Officier de la Legion d'Honneur by the French Government for his services to the building industry. In order to celebrate this he invited 250 of his workpeople and 280 friends to have lunch with him in his workshops. Finally, M. Pentier stood on the table and was kissed on each cheek by his foremen and by some of his oldest building operatives. This was a striking demonstration of the way capital, management, and labour apparently work together on the most friendly terms."

More Publicity for Architecture.

PUBLICITY has been accepted as so necessary to success that we have inferred this must be as true for the arts as for commerce. It would be difficult to say, however, that this was necessarily the case, yet architecture is, according to some, requiring more advertisement for its proper progress, and should be subject to more talk and criticism, needing, in fact, art critics in the same way as pictures and sculpture. From which it is inferred that art criticism is a source of promotion to the latter, a view not always accepted. We think it quite possible to argue in an opposite direction, and to doubt whether greater publicity by criticism, magazine articles, and new institutions are of much benefit to architecture. After all, we are not all converted to industrial methods, and too much self-assertion is not always the direction in which we look for the best things. On the face of it our streets are themselves a prominent, if not always persuasive, announcement of architecture, and this new anxiety for architecture is somewhat misdirected. It is better evidence of its character that it functions naturally, growing through its own strength, and the claims upon public recognition which that value inspires. Some will doubt whether the results of so much art criticism has contributed to the welfare of the arts, whether it has enlightened the public or made sound judgment more difficult. Publicity has its dangers as well as its rights, and the best advertisement for architecture will ever be the beautiful building.

North Gate, Rochester.

From a Pencil Sketch by MR. C. F. W. DENING, F.R.I.B.A.

Laws of Beauty and Use.

WHEN we complain that a roofing tile, surface, or whatever else in material or form is ugly, can it be shown that what is not beautiful, is not useful—that is to say, does not fulfil its purpose so well? If so, we have an argument capable of showing that the becoming thing is the one most economical. But can we substantiate this, or is beauty subject to such proofs? We think not. Beauty is not capable of intellectual proof, being rather something that we feel. Truth in such matters being not proven but seen. What we feel, therefore, in these matters is a question of taste, hereditary and acquired. Taste which, though we appreciate it, is difficult of proof.

The Higher Law of Beauty.

IT would seem, therefore, that of the best we are hardly conscious, and that it emerges out of life, according as it is held on one plane or another, on one utilitarian and materialistic, or one higher. The cost of the lower outlook is that we cease to distinguish. Choice, therefore, is of a consequence far greater than we thought, for ugliness can be sufficient on one plane of life, and the argument that ugliness is not useful in a lower sense, cannot be upheld. What it does show is that the absence of beauty is proof of the low level at which life is lived.

Hustling the Architect.

IT is highly gratifying when commercial magnates from across the Atlantic, bent on erecting colossal factories here, make choice of British architects to carry out the work. But we would suggest, with diffidence and deference, that a too abundant importation of "Yankee hustle" might be avoided with advantage to both sides. One of our contemporaries records how two directors of a Transatlantic company paid a visit to England early in the year to arrange for the erection of a factory and, having selected a well-known firm of architects, interviewed the senior partner. They told him, it is reported, of their disappointment as regard "pep" in this country, and then asked him if he could prepare all the drawings, quantities, and specifications for the proposed factory within a week. By working day and night the firm achieved this feat and were subsequently informed by their clients that the most up-to-date American architects could not have made a better record. It does not appear that any mistakes occurred, but we venture to think that, under such pressure, some errors would not have been surprising. An architect's work is strenuous enough under ordinary conditions, but if this sort of thing is to become general the strain will be intolerable.

Building for Advertisement.

THE same contemporary informs its readers, apparently from an "inspired" source, that while efficiency is the first consideration of a company in erecting a commercial building, "there are other minor considerations, such as the advertisement-value of the appearance of the building and its possibilities for advertising display." This emphasises the necessity of some limitation to the disfigurement of buildings by huge letterings and other signs.

GENERAL NEWS

Appointment.

Mr. A. Cartwright has been appointed a director of Vickers, Ltd. Mr. G. G. Sim has been appointed secretary of the same firm.

Change of Address.

Mr. Stanley G. Soper, A.R.I.B.A., has removed from South Kensington to new offices at No. 7, John-street, Adelphi, W.C.2.

Partnerships Dissolved.

The partnership which was conditionally arranged between Messrs. J. S. Gibson, W. S. A. Gordon and James M. Wilson, architects, has been mutually dissolved so far as Mr. James M. Wilson is concerned. Messrs. J. S. Gibson and Gordon will continue their practice at 5, Old Bond Street, W.1.

The partnership which has subsisted between Mr. David Barclay Niven and Mr. Herbert Hardy Wigglesworth for more than thirty years under the style of Messrs. Niven & Wigglesworth, has been dissolved as from May 8, 1926. Mr. Wigglesworth will continue to practise under the style of the late firm of Niven & Wigglesworth, at 7, John-street, Bedford-row, W.C.1.

Memorial to William Willett.

A bust of William Willett, the originator of Summer Time, who died in 1915, was unveiled by his daughter, Mrs. G. Magrane, in the Albert Hall and Art Gallery, Colchester, this week. The bust is in bronze and stands on a pedestal of Sienna marble. The sculptor was Mr. Herbert C. Grimwood, of Ipswich, and the pedestal was designed by Mr. Duncan Clark, of Colchester.

Middleton War Memorial.

Middleton War Memorial Committee has decided that the war memorial shall take the form of a garden of remembrance in the grounds of the new Town Hall, Manchester Old-road, the estimated cost being £4,750. The land required has been placed at the disposal of the committee by the Town Council, and Messrs. Taylor & Simister, of Oldham, have prepared plans.

Paisley Abbey Restoration.

The sisters of the late Sir John Stewart Clark, Bt., have made provision for the continuance and completion of the work of the restoration of the choir of Paisley Abbey. This offer by the Misses Clark also makes possible the work on the organ front and the construction of carved stalls. The work is to proceed at once under the supervision of Sir Robert Lorimer, R.S.A., A.R.A., and will virtually mean the completion of the Abbey restoration.

Danger to Cologne Cathedral.

An appeal for new members is being issued throughout Germany by the Cologne Cathedral Preservation Society. It is stated that the time has come when it must be decided whether the Cathedral is to be allowed to go to ruin or is to be preserved.

Town-Planning Institute.

Mr. W. R. Davidge, F.R.I.B.A. Senior Vice-President of the Town-Planning Institute, has been elected President for the year 1926-7.

Short Course of Instruction for Teachers.

The following lectures are to be given at the Victoria and Albert Museum :—

Monday, July 26, at 2.30 p.m.—Mr. F. W. Burrows, H.M.I., on "Junior Departments of Schools of Art."

Tuesday, July 27, at 3 p.m.—Mr. George P. Baker, on "Textile Printing—the Influence of India upon the West."

Wednesday, July 28, at 2.30 p.m.—Mr. Will Miller (Secretary to National Painters' and Decorators' Joint Education Committee of England and Wales), on "The Instruction of Painterss nd Decorators in Schools of Art."

Thursday, July 29, at 3 p.m.—Sir Lawrence Weaver, K.B.E., on "Design and Craftsmanship in Things of Common Use."

Friday, July 30, at 11 a.m.—Lady Duff Gordon, on "Art in Dress."

Housing in the City.

The Corporation are about to erect a large block of tenement buildings on a site adjoining Shepherdess-walk and Wenlock-road, City-road, to provide accommodation for persons displaced in the City in insanitary areas.

Nurses' Home.

The Nurses' Home attached to the Ashton District Infirmary, recently opened, forms part of a large scheme of extensions. The architects are Dr. Percy Worthington and Prof. Hubert Worthington, FF.R.I.B.A., of Manchester. Messrs. E. Marshall & Sons, Ltd., of Ashton-under-Lyne, were the contractors. The building, furnishing and equipment will cost about £29,000.

New Roman Catholic Church, Winchester.

Cardinal Bourne has dedicated the new Roman Catholic Church of St. Peter, at Winchester, which has been designed by Mr. Frederick Walters in the decorated style, thus avoiding the risk of comparison with Wykeham's work in the cathedral and college. The church, which is faced externally with Bargate stone, from the Petersfield district, the wrought work being of Bath stone, is 123 ft. long and 51 ft. wide, and is divided into a wide nave and two aisles. There is a bell tower 74 ft. high.

COMPETITION NEWS

League of Nations Building, Geneva.

WE have received a copy of the programme and rules for the architectural competition which is to be held for the League of Nations building, to be erected at Geneva. This gives very full particulars of accommodation required, &c., and includes the following "annexes" :—

I. General Plan of the City of Geneva, showing the situation of the League of Nations new property; ii, Ground Plan drawn to the scale of 2 mm. to the meter; ii*bis*, Supplement to the Ground Plan; iii, Geological Sections and Map of the Borings; iv, ten Photographs; v, Table showing all the Rooms required; vi, Sketch showing a Specimen Arrangement of the Desks; vii, Specimen Estimate, with List of Prices; viii, Scale of Fees for Architectural Work, for the use of the members of the Swiss Association of Engineers and Architects; ix, Note explaining the organisation of the League of Nations; x, Table of Dates for the dispatch of: (*a*) programmes, and (*b*) plans presented by the competitors.

The competition will be open until January 25, 1927, to architects who are nationals of States which are members of the League on that date. No competitor or firm may submit more than one design or send in sketches or plans not asked for in the present programme and rules of the competition. No award will be made in respect of any design if it is incomplete, or if the jury is of opinion that the cost of executing such plan would exceed the amount indicated, or if it does not comply with the conditions of the specification. Competitors must: (*a*) Forward a signed declaration that the designs submitted by them to the jury are their own work and were drawn by them or under their immediate direction; (*b*) furnish evidence that they are personally capable of acting as architects in charge of building operations.

The sum of 165,000 Swiss francs will be placed at the jury's disposal for awards in respect of those designs which it considers the best. The prizes and supplementary awards will be as follows :—

	Swiss francs.
First prize	30,000.—
Second prize A	25,000.—
Second prize B	25,000.—
Third prize	20,000.—
Fourth and fifth prizes .. (each)	15,000.—
Sixth and seventh prizes ,,	5,000.—

The jury will also have at its disposal 25,000 Swiss francs, to be distributed in the form of supplementary awards, of not less than 2,500 Swiss francs each, to the best designs which have not been awarded prizes. Should certain prizes not be given, the money will be distributed in the form of further supplementary awards. The drawings, estimates and descriptions of the designs awarded the first, second and third prizes will become the property of the League of Nations.

The fees payable to the architect selected to erect the building will be at the rate of 5 per cent. of the total cost of erection and of any furniture which the architect may be asked to design. These fees will cover all the work generally undertaken by architects, as specified in the scale of fees of the Swiss Association of Engineers and Architects, supplied to competitors.

The jury consists of nine members: M. H. P. Berlage (The Hague), Sir John J. Burnet (London), M. Charles Gato (Madrid), M. Joseph Hoffmann (Vienna), M. Victor Horta (Brussels) President, M. Charles Lemaresquier (Paris), M. Karl Moser (Zurich), M. Attilio Muggia (Bologna), M. Ivar Tengbom (Stockholm).

Should any member of the jury be unavoidably prevented from taking part in the deliberations, his place will be taken by a substitute member of the same nationality. The substitute members are: M. W. Kromhout (Renkum-Arnhem), Mr. H. S. Goodhart-Rendel (London), M. Pascual Bravo (Madrid), M. Eugen Steinhof (Vienna), M. Franz de Vestel (Brussels), M. Gabriel Héraud (Paris), M. Camille Martin (Geneva), M. G. B. Milani (Rome), M. Erik Lallerstedt (Stockholm).

Aberdeen Beach Improvements.

Twenty-one sets of designs have been submitted in this competition. Mr. John Keppie, A.R.S.A., F.R.I.B.A., the assessor, has reported to the Links and Parks Committee that all the designs exceed the expenditure allowed for, namely, £50,000. It was stated, however, that several of the designs are suitable for emendation and curtailment, and the assessor hopes to make his award in the course of the next few days.

Proposed New Academy, Perth.

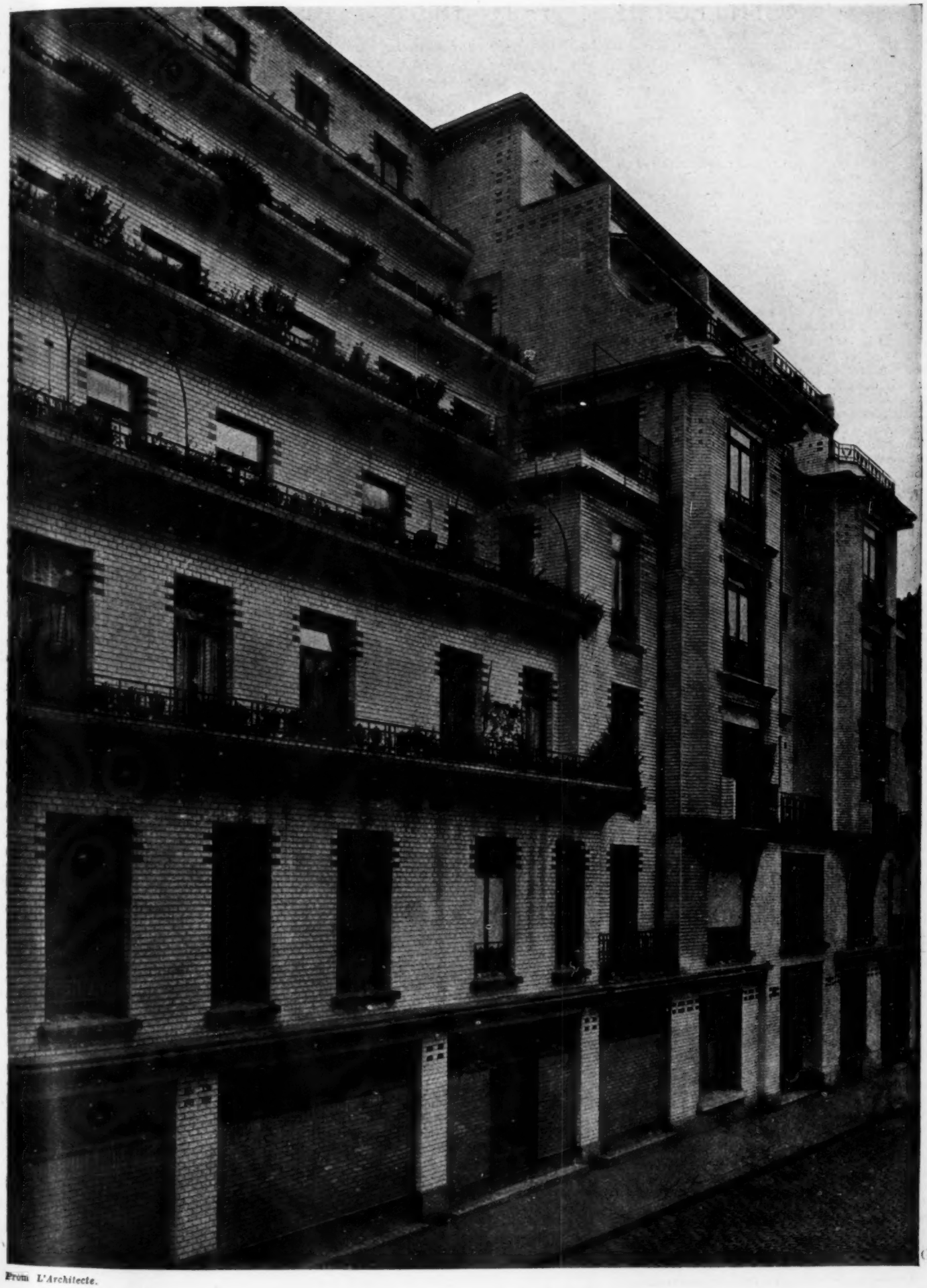
The Education Authority of the County of Perth invite qualified architects practising in Scotland to submit plans, designs and estimates for a new Academy, proposed to be erected at Viewlands, Perth. Premiums £100 and £150. Assessor Mr. James D. Cairns. Designs to be sent in not later than January 3, 1927. Copy of conditions of competition may be obtained from Mr. R. Martin Bates, Executive Officer, Education Offices, Perth. Deposit of £1 to be sent with application.

Scottish Legal Life Assurance Society: New Premises.

The President of the R.I.B.A. has nominated Mr. John Keppie, A.R.S.A., F.R.I.B.A., as assessor in this competition.

COMPETITIONS OPEN.

	Particulars	Sending-in date.
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnet being British representative on Jury of Assessors. See latest information under Competition News.	published in "Builder."	Jan. 25, 1927.
Cenotaph, Liverpool. To be erected outside St. George's Hall. Premiums: 1st, £200; 2nd, £150; 3rd, £100; 4th, £50. Author of selected design will be paid commission of 500 guineas, to include premium. Professor C. H. Reilly, assessor. Second premium will only be awarded to ex-Service man	June 11 ..	Sept 30
Incorporated Architects in Scotland: (1) Rowand Anderson Medal and £100: City Art Gallery and Museum; (2) Rutland Prize (£50) for Study of Materials and Construction: (3) Prize (£10 to £15) for 3rd year Students in Scotland; (4) Maintenance Scholarship, £50 per annum for 3 years. Apply Secretary of the Incorporation, 15, Rutland-square, Edinburgh	Nov. 6 ..	—



From *L'Architecte.*

Apartment House, Rue Vavin, Paris.

MESSRS. SAUVAGE & SARRAZIN, Architects. (*See article on p.* 122.)

THE DEVELOPMENT OF AMERICAN ARCHITECTURE. 1783—1830*

THIS volume is in continuation of an account of American Colonial Architecture by the same author, and deals with the period 1783–1830. It is concerned, of course, with facts that are of primary interest for our great cousin nation, but many of us might find in it suggestions on the problems which are about and in front of us. It is not a large architectural book having a great number of plates, but a small octavo with about fifty illustrations—a pleasant book to read and of a thought provoking kind. Moreover, it is written in a friendly and generous spirit towards us "Britishers."

"One of the earliest architects of importance to arrive in New England was Peter Harrison, who came from England about 1725. It is doubtful if Harrison was an architect within the modified meaning of the term. It is said that he was engaged on Blenheim Palace. . . . It may be assumed that he was a skilled carpenter or mason. In the modern sense we should refer to Harrison as a builder rather than an architect, although he was, on account of his designs and knowledge of construction, entitled to be reckoned among the latter. He must have been a young man, for as late as 1775 he erected a Jewish synagogue at Newport. . . . John Smybert, who is best known as a portrait painter, came to Rhode Island about the same time that Harrison came here. Smybert was a native of Edinburgh, born in 1684. Originally a house painter, he began to paint portraits, among them a group of Bishop Berkeley's family. Smybert, of course, was not an architect either by profession or training, but he was an artist, and at the time he came to America he probably was the only painter of any pretensions in the Colonies. He was the master of Copley in the sense that his paintings influenced that distinguished painter." And so on; it is a pleasant story of nice people who, by the mere fact of being what they were and living when and where they did, built like human creatures.

"The early architects of the city [Baltimore], as was the case everywhere in the United States in those days, were graduates from the carpenter's shop; they were practical builders even before they were architects. While that kind of architect may be deficient in the purity of his taste and design, he is almost sure to be good in the matter of building engineering as practised in those times, and in the matter of erecting substantial structures. Strength both in design and construction were the main requirements of the architect and builder a century ago. The jerry-built house was left for a succeeding age to produce. . . . Robert Carey Long, born in Maryland, in 1772, after learning the trade of carpenter went into business as a builder in the City of Baltimore. He became one of the leading architects in that city, and some of his works may be seen to-day, displaying as they do a fine taste which rejected the merely ornamental for form."

The oldest building illustrated is the State House, Boston, "the finest building in New England in 1790," and an entirely charming thing of brick.

French architects also worked in America, and a most interesting account is given of the planning of Washington. "If the credit of building Washington may be said to belong to any single man, that merit may be justly awarded to President Washington, who took a living interest in the work of the Commissioners and of the unfortunate engineer Major L'Enfant, whose general plan of the City is now appreciated by city planners everywhere and by architects." For the buildings "five architects were principally responsible, all foreigners": L'Enfant; Thornton, born in the British West Indies and educated "in the old country"; Hoban, an Irishman who received his education at Dublin"; Latrobe, another British artist educated in London"; Hallet, a Frenchman; "and later came Hadfield, another Englishman who was educated in London." Many of the buildings illustrated are obviously quite English. The "Octagon" might be a big house at Kew; the "Six Buildings," 1795, might be one of the fine terraces at Brighton; "the White House was a small copy of Chatsworth."

I pick out these points as being specially interesting to us "on this side," not as making any claim. The Englishness of some of these buildings is—if one may say so—quite touching. At the same time American things had their special character from quite an early time. A French writer said of the cities at the end of the seventeenth century: "They have no brilliant monuments, but they have commodious churches, good houses, superb bridges, and excellent ships. Their streets are well illuminated at night; while the ancient cities of Europe, containing proud monuments of art, have never yet thought of preventing the fatal effect of nocturnal darkness."

An interesting fact to us is brought out on page 85. "Another French architect, or rather engineer, who worked in New York City at the close of the eighteenth century, was Sir Marc Isambard Brunel, who had been in the French engineering service, but had lived in America during the French Revolution. The one particular building for which he is noted was the Park Theatre, New York City, which he erected about 1798. Like other French engineers and architects who came to America about this time, he naturally had ideas of grandeur that did not square with the American pocket-book in those days. His idea of a theatre was such a playhouse as Paris should have. Brunel's original design is said to have called for a row of fluted pilasters along the front, but these were never built. Brunel afterwards returned to Europe and became more or less famous as the planner of the Thames Tunnel, which was begun in 1824. For this great work the engineer received the order of knighthood." This Brunel (senior) seems to have come to England early in the nineteenth century—he died 1849. That the son, the railway builder, had such a father, may explain the dignified character of his engineering work; it was quite different from the catch-penny inadequacies to which we of a late generation have had to become accustomed.

In considering the results of the Revolution in stimulating interest in native art, the author has some interesting remarks, but I am not sure that his facts are quite right. "The Greek revival seems to have been forced upon them for the reason that they wanted to abandon British tradition so far as they could, and give the new country a newer style. . . . The British school at the time was largely influenced by the so-called French Renaissance, and this was far too ornamental to suit the plain tastes of a people who were trying to find themselves, as the Americans were. . . . This was the situation when Strickland made his appearance. . . . It was not until he built the Bank of the United States (1835) that he began to be heralded as a great architect. . . . Strickland drew his inspiration from the Parthenon. At the time of its erection it was undoubtedly the finest architectural work in the United States, and may be said to have been the turning point in our native architecture. It might be Greek, but certainly it was not flavoured with any British influence, and our native styles were due for a change." But surely the period 1800–30 was exactly the high-time of Greek imitation in England. From the British Museum to the Markets at Exeter and the "ruins" at Edinburgh, exercises in sham Greek—some wonderfully able and most of them passable—may hardly be counted. Both here and in America the principal text-book and authority was probably Stuart and Revett's "Athens." In his further volumes I hope the author will go on to consider a general theory of reasonable building. In establishing such a system, I trust that some day a practice of mutual borrowing will spring up as between us and America and other countries. My fear is that when some other country has taken to reasonable building, that we shall then copy just their results as the "Reasonable style" with good sham honesty "effects" and structural-looking "proportions." This, I understand, would be "æsthetics," for appearance is something different from being, and "architecture" from building.

So, at least, some over clever people seem to teach, but fortunately there is no need to believe them

W. R. LETHABY.

* By Joseph Jackson. (Philadelph'a.)

NEW DEVELOPMENTS IN FRENCH DOMESTIC ARCHITECTURE

FRENCH architects have of late shown much initiative in the matter of introducing new features in domestic architecture, and, in particular, there are to be noted some original developments in the construction of flats. It is a question of an entirely new departure from the accepted ideas, and although there apparently are some drawbacks, in any case in the matter of floor area, the system is being tried in earnest and on a fairly extensive scale.

We are referring to the terrace-shaped houses of MM. Sauvage and Sarrazin, which are attracting a considerable amount of attention. Their distinctive feature is the manner in which the frontage of each story recedes behind the one underneath, so that the projecting flat portion of the latter's top forms a terrace for the story above. The breadth of these terraces is about 1 metre, and they run along the whole frontage of the building, excepting a smaller vertical-fronted portion, principally intended for staircase, at the same time as they break the terrace lines of the street. The two obvious advantages of this system are increased air and light in the streets and houses, and a regular, independent terrace for each flat along the whole of its frontage. But the floor area of each flat is naturally reduced by the accumulated breadth of the underlying terraces. A house of this type is to be found in Rue Vavin, Paris (illustrated on page 121), containing seven stories, of which the plans of the upper stories naturally have had to be modified, owing to their much reduced area, the back of the house towards the courtyard being vertical, so there is no compensation in any corresponding projection.

A Danish architect who has interested himself in this new style also mentions a more ambitious scheme, at present in course of construction, viz., a complex of buildings erected by the Municipality of Paris in Rue des Amizaux. The building occupies three sides of a rectangular site, with streets running along the three sides, the terrace principle having been adopted on the two longer sides, giving to the building, as far as these are concerned, rather the look of a steep pyramid; the roof is flat, and the courtyard is covered above the first floor, to give accommodation for a baths establishment. Above this the distance between the vertical walls of the courtyard is further narrowed in, and apart from the top light of the baths establishment, there are only a few windows facing the courtyard. There is one set of stairs for each residence, and the kitchens by means of small elevators are connected with the basement for the transport of fuel and disposal of garbage.

The height is ten stories, the supporting skeleton, the stairs and the partitions between the stories being ferro-concrete, and the outer walls of brick.

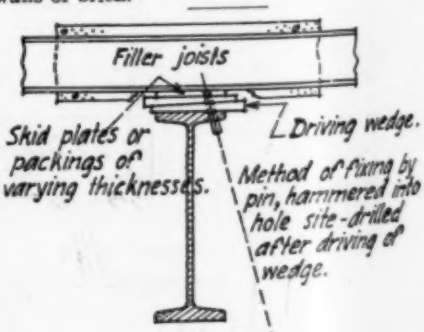

Filler joists
Skid plates or packings of varying thicknesses.
Driving wedge.
Method of fixing by pin, hammered into hole site-drilled after driving of wedge.

FIG. 4.

(See article on facing page.)

STRUCTURAL PROBLEMS—II

CONNECTED WITH THE PROVISION OF AN ADDITIONAL STORY TO AN EXISTING BUILDING.

By G. A. GARDNER, M.I.Struct.E., Assoc.I.E.E., etc.

ADVERTING to the strengthening scheme illustrated in Fig. 3, the resistance of the new beam relieving the filler joists may be evoked by a system of steel folding wedges, as indicated in Fig. 4, or by straining the beam down with suitably devised tackle and packing the space between its top flange and the underside of the concrete with "dry" cement mortar. In the former case the pairs of folding wedges may in some instances be made sufficiently long to allow the different degrees of drive necessary to accommodate the varying deflection of the new beam from its ends to its centre, or shorter wedges may be used, driven to a constant amount, with the addition of skid-plates or packings of varying thicknesses to suit the deflection. It is usually considered advisable to secure the wedges after driving, although, except in cases where the floor will be subjected to the vibration of machinery, there would appear to be little likelihood of slackening. In the class of example under consideration, concrete casing to the strengthening beams will suffice to fix the wedges; or, in the event of there being no casing, the ends of the wedges may be caulked into each other.

Forged wedges will be sufficiently accurate for the purpose under review, and a taper of 1 in 24 to 30 will prove suitable in most cases.

Speaking generally as to strengthening operations in which wedging plays a part, the elaboration of the wedging system depends upon the magnitude of the beams and girders to be dealt with, and in heavy work the wedges may require to be planed on the sliding surfaces and finally secured in place by taper-pins, bolts, or clips after the wedges, skid-plates, and girder flanges have been drilled through *in situ*.

In some instances, although wedges must be employed for making secondary adjustments, the stiffness of the strengthening beams necessitates the use of screw or hydraulic jacks, or some other form of straining tackle, to produce the required deflection.* When using hydraulic jacks extreme care is necessary in order to avoid the likelihood of the work being over-strained; and the operations should be strictly supervised, preferably by the structural engineer's assistant responsible for the design.

The degree of accuracy to which the deflection need be gauged may vary according to particular circumstances, but it is generally advisable to calculate the deflections which should result from (*a*) the weight of the construction only, and (*b*) the combined weight of construction and superimposed load. In some instances of floor-strengthening it is hardly possible to have the superimposed load removed, as, for example, where a floor is carrying machinery; but in the type of case now under consideration the superimposed load will not be applied till the strengthening operations are complete, and therefore the auxiliary beams must not be deflected beyond an amount compatible with resistance to an appropriate proportion of the load from existing construction only.

When the wedging operations are in progress the required deflection may be measured by one or other of the several kinds of strain-gauges on the market, which indicate to a greatly magnified scale the downward movement on a dial; or an improvised recorder of the lever or vernier type may be used—an arrangement of the lever type that the author has found suitable being illustrated in Fig. 5. It is usual to record the deflection only at the centre of the beam and gradually to tighten all the wedges until the required reading is registered, but whilst this is sufficiently accurate in the ordinary run of cases, it does not necessarily ensure the *form* of the deflection curve being of the right order, and therefore, where the importance of the operations justify it, the deflection is measured at more than one place. The use of feeler gauges for ensuring the calculated deflection at several points will be mentioned later in touching upon the strengthening of the main beams.

As intimated in the opening paragraph of this article, where the use of wedges or jacks is not practicable some other form of straining-tackle must be employed. An ordinary chain and differential pulley-block attached to an adequate anchorage may be suitable, or a similar form of rig in which a tension screw is utilised. Fig. 6 shows in schematic form an arrangement which includes an assemblage of springs of known resilience, acted upon by a screw. In this case the calculated deflection is not taken as the criterion, but the tackle is screwed up until the compression of the springs registers the load required to be brought on to the beam, the springs having been previously tested in a laboratory and a table drawn up of their resistance per unit of compression. An arrangement of this sort is particularly convenient in such a case as that illustrated in the figure, where one has not only to contend with the downward deflection of the strengthening beam, but with the reciprocal upward deflection of the slabbing and the existing beams. The provision of special tackle such as this, is, of course, not as a rule justified unless there is considerable repetition of work to be dealt with.

It is probable that in reading these articles those whose experience has been confined almost exclusively to new works, or maintenance and reconstruction work of comparatively small magnitude, will feel that the degree of refinement suggested by the foregoing descriptions is somewhat unnecessary, but whilst it may be admitted that in some cases the principle of mechanically evoking the resistance of the strengthening system by wedging or some equivalent means may be ignored without the apparent development of any subsequent defects of a more serious nature than cracks in the concrete (or brickwork, in the case of bressummers), the degree to which the work may be left to "adjust itself" must in many instances be reduced to a minimum. Moreover, it must not be lost sight of that cracks of any kind are generally regarded by the layman with suspicion and are not a good advertisement. The practical judgment of those whose services are ordinarily indispensable

FIG. 5.

in the great run of commercial and public building operations may be somewhat at fault in matters necessitating a knowledge of the finer sides of structural work, and (begging leave to use an illustration from "real life") it does not follow because an able foreman surreptitiously designates certain wedging operations as "clock-making"—with a forcible epithet prefixed!—that the work could be satisfactorily carried out in any other fashion. *Apropos* the question of cracks, the contingency of the upward deflection of concrete slabbing causing cracking due to over-straining, must be carefully guarded against.

The use of rapid-hardening aluminous cements in mortar for packing above the auxiliary beams should result in a very considerable saving of time in cases where the deflections are produced by straining-tackle without the employment of wedges. The mortar will be sufficiently hard in 24 hours or less to permit the tackle being released for other beams remaining to be treated. Not only in connection with floor-strengthening schemes, but for all cases in which auxiliary structural work figures, the use of rapid-hardening cements for such items as foundation extensions, bearing pads, grouting, &c., is very advantageous, in that heavy intensities of pressure can safely be permitted much sooner than would be the case with ordinary Portland cement—It not infrequently happens that pressures of 20 tons or more per sq. ft. are required to be taken by concrete within a few days of pouring.

The strengthening of main beams or girders, where necessary, is often attended with more difficulty than in the case of the other parts of the floor so far considered. The trouble of insufficient headroom (including under this category the height required in some cases for architectural effect) sometimes prohibits the use of auxiliary beams placed longitudinally under or over the existing ones, and in such instances the more difficult and unusual procedure of increasing the section of the existing beams by the addition of riveted or bolted plate work, or of placing auxiliary beams alongside them, may have to be undertaken. In one case the author was connected with, the main beams, which had, unfortunately, been erroneously designed (not by a structural engineer!), were utilised by being trussed after the manner of trussed beams in timber; and this constitutes a method which might offer a solution in cases where unsightliness and headroom need not be considered.

Where it is permissible to place the strengthening beams *over* the existing ones, an entirely new floor, of pre-cast reinforced concrete units for instance, may be built over the existing flat roof

* The writer has for instance recently employed two 20-ton hydraulic jacks to each of a series of strengthening girders.

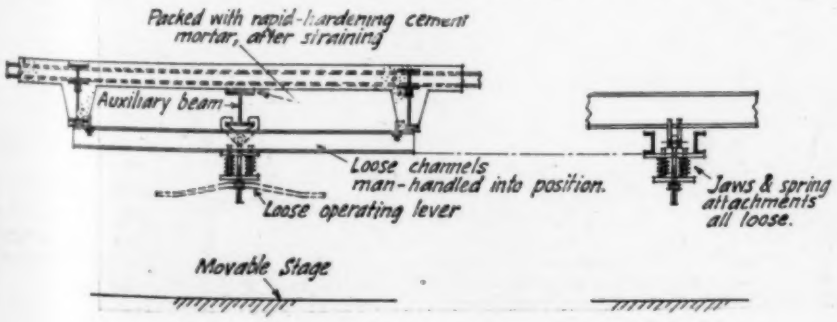

Packed with rapid-hardening cement mortar, after straining
Auxiliary beam
Loose channels man-handled into position.
Loose operating lever
Jaws & spring attachments all loose.
Movable Stage

FIG. 6.

construction, or, if statutory regulations allow it, the new floor may be of timber on secondary steel framing, with the existing concrete construction serving in some measure as fire protection.

Whether the new beams are placed over or under those existing, the object will be to make the two act interdependently in carrying the total load, and to this end their relative deflections must be controlled. It is much easier to attain this when the auxiliary beams are underneath, for in that case they may be wedged down from the existing beam at regular intervals, thus evoking the resistance of the new beam by deflecting it downwards at the same time as the stress in the existing beam is relieved due to its mutual deflection upwards. The degree to which the wedging is to be taken must be carefully calculated beforehand, and, in fact, the design of the auxiliary beams will be dictated primarily by these considerations of relative deflection. The use of feeler gauges (*loc. cit.*) in the form of short lengths of ½ in. diameter rod prepared to suit the calculated differences in deflection and any irregularities in the existing beams or girders, such as a wind in the bottom flange, will facilitate the wedging operations and ensure as near an approach as possible to the theoretic conditions.

When the auxiliary beams are to be placed over the existing beams, it is generally desirable from a practical point of view to pick up the latter at their centres only, in order to avoid the expense of preparing permanent hangers or clips of varying dimensions to suit the different deflections at a number of points along the beams. The effective depth of clips of constant size *could* be varied by a system of wedging, but the arrangement would be complicated and costly. The function of the central clip is to relieve the existing beam of some deflection by evoking the resistance of the new beam due to its reciprocal deflection downwards. To this end the clip must be made to the required depth indicated by careful calculation of the relative deflections, and secured in position after the pairs of beams have been mutually strained towards each other by temporary tackle. The straining-tackle can be similar in principle to one or other of the types previously described, and in some instances the use of jacks may be necessary.

It will be understood that the straining must have reference to an appropriate proportion of the dead loading existing at the time of erection of the auxiliary beams, and that when the weight of any added floor construction, together with the superimposed load, is brought on, both beams will be further deflected, due to their interdependent action, and will assist in carrying the total weight. The rigidity of the clips is essential for a successful carrying out of the scheme, and their design must be carefully attended to, as must also the question of the somewhat severe local stresses likely to be set up in the beams where the clips are attached. In one scheme supervised by the author, the clips were solid forged, 2½ in. in thickness.

At the risk of wearying the general reader, much more could be said respecting technical details *re* the interdependent action of beams; but after briefly considering the question of fire protection of the added steelwork, methods of strengthening the sub-structure will be dealt with. Under this heading the special provisions at the bearings of added beams will be touched upon.

(To be continued.)

Clopton Bridge Saved.

Stratford Town Council have approved a scheme for a new bridge over the Avon at a point now occupied by a disused tramway bridge. The estimated cost is £41,000, and the scheme will leave the old Clopton bridge intact.

EXHIBITION NOTES

EPSTEIN SCULPTURE.

The recent works of sculpture by Epstein now being shown at the Leicester Galleries provide striking illustrations of his power of rugged characterisation. Why these people whom he has modelled should be represented at all is not easily answered, perhaps, by the average person, who will probably see in them chiefly those types of people who make no appeal to the sense of beauty. Character is, of course, often lacking in men and women whose features have a definite regularity and beauty, but it is difficult to see how one should desire to see permanently represented faces and figures which border on the grotesque. The curious will wonder why any sculptor of Epstein's power should elect to show his skill in subjects which must be more or less repellent to the average person. One cannot help feeling that the great ability of this sculptor might be better directed in the idealisation of beauty and grace.

Bartlett School of Architecture.

The following awards have been made in the Bartlett School of Architecture at University College:—

Bartlett Entrance Exhibitions: H. H. Ford, Eastbourne Municipal Secondary School; E. F. Starling, Whitgift Middle School, Croydon.

Donaldson Silver Medal: H. T. Dyer.

Prize for Design in Ferro-Concrete (£25): Jessie M. Greig.

Ronald Jones Prizes: W. F. B. Lovett (Mediæval Architecture), W. G. D. Anderson (Renaissance Architecture).

Herbert Batsford Prize: Edna M. L. Mills.

Certificates in Architecture: C. P. F. Fleetwood-Hesketh, P. A. Wailes.

Sub-Department of Town-Planning: Certificates, A. J. Hill, H. A. Johnson, T. Ritchie.

Lloyds Bank, Hoylake, Cheshire. MESSRS. GRAYSON & BARNISH, FF.R.I.B.A., Architects.

THE LIVERPOOL SCHOOL OF ARCHITECTURE

ANNUAL EXHIBITION OF STUDENTS' WORK.

IT is an interesting fact to record of any annual exhibition, and of an architectural exhibition in particular, that the number of persons who visit it increases year by year, and it is pleasant to note that the exhibition of the work of the students of the Liverpool University School of Architecture comes within this category. This year's exhibition was favoured in its opening by the presence of Mr. T. P. O'Connor, M.P., supported by Sir Martin Conway, M.P., the former of whom referred in his opening address to the ever-widening field of influence exerted by the Liverpool School, the influence of good scholarship and sober taste on an architectural world which, he thought, had been at times "a little mad."

As in former years, the display of drawings is well arranged to show the student's progress from his first year, through the stages of simple composition and elementary design, to the making of measured drawings of existing buildings of architectural interest and, later, more advanced design followed out in complete working drawings. Then comes a period of work in the office of a practising architect until the student reaches his fifth year and submits his preliminary design, and possibly his final also, for the Rome and Jarvis Scholarships.

The curriculum which lies before the student as he enters the school is undoubtedly well planned in every detail, and has been proved productive of extraordinarily good results, not only in the sphere of competitions for purely academic prizes, but in those competitions of a more practical order of everyday professional life.

The examples of first year work included in the exhibition show some of the ways in which the talent of the young student is developed. In particular, one noted a well-drawn and rendered plan of St. George's Hall, Liverpool, together with a similar plan of the completed scheme of the new Liverpool Cathedral. As these plans were drawn to the same scale it was interesting to observe that the two buildings will cover, when the latter is complete, approximately the same area of ground.

Considerable attention is also paid to the lettering on drawings, which generally throughout the exhibition maintains a uniformly high standard. The somewhat old-fashioned, but none the less useful, "isometric view," is also much in evidence in the First Year to illustrate joinery and other details.

The Second Year is represented entirely by compositions of the Orders, and, apparently, great stress is laid on this work from the point of view of training. Apart from draughtsmanship a great deal of appreciation of the architectural qualities of light and shade is required for the production of a successful composition, and judging by the particularly high standard of the dozen or so drawings of this type on view the Second Year students are by no means lacking in this faculty.

As a composition of outstanding merit we should select that showing details from the Fontaine de Trevi. Unfortunately, the author's name does not appear on the drawing. In this connection we should like again to call the attention of the organisers of the exhibition to the additional interest which it would afford to know the students' names. These would not, of course, be of interest if all the work were of not so individual a character. Before leaving the Second Year work we must also refer to another composition of details by Sansovino, which gives a charming glimpse of the library and a part of S. Mark's Square, Venice.

In the Third Year problems in design first make an appearance. Two schemes for a Church of Christ Scientist we must confess we found rather unconvincing, but in the designs for a Memorial Cloister there was much more evidence of appreciation of the programme.

A Bookshop and Architects' Club has not, as might be expected, failed to rouse considerable enthusiasm. The design by Mr. H. G. Ellis depicts a charming façade in brick and stone, reminiscent of the best Colonial work, with a very pleasing shop window giving just those glimpses of well-bound books which might make the average bookseller's window attractive, in contrast with the general existing scheme of converting it into an overloaded book stack. Mr. Alec. Owen's solution of the same problem is also excellent. There is a great deal of breadth and dignity in the façade, though the plan, owing to the waste of good ground-floor space, which is divided off for lavatory accommodation, is not so good as that of Mr. Ellis.

Amongst the large problems one noted a public hall in a park. A great deal of effort has obviously been concentrated on the planning, that in particular of Mr. S. J. Docking deserves praise. The entrances and exits are very well arranged and the seating on the platform has been set out in a thoroughly practical manner. There are, for this problem, several simple elevations in brick and stone, any of which would grace the best of public parks and do credit to a municipality which might be so enlightened as to erect it.

Mr. H. Bramhill's design for a County Inn is an altogether delightful conception, presented in a set of delicately-rendered drawings. Internally, perhaps, the horse-shoe staircase is a little extravagant, but the arrangement of the lounge and loggia is good. Mr. Neumann's scheme for the same subject is generally a good piece of work, but the plan is faulty in the matter of the lighting of the entrance hall, and the public rooms are comparatively small.

The examples of measured work on exhibition comprise a set of seven drawings of the interior of the Liverpool Town Hall, designed by John Wood of Bath in 1748. The delicate detail of this period, of which good examples abound in the Town Hall, is very sympathetically drawn.

Amongst the Fourth-Year problems is a scheme for a Sculptor's House, which, one ventures to think, has proved rather a stumbling-block. The studio occupies almost as large an area as the rest of the house, and the struggle between these two elements is obvious in most of the elevations; possibly better solutions would have been arrived at if the studio had been made an annexe of the house. The drawings illustrating an Ironworkers' Establishment present a brick and marble façade with ample display for the craftsman's work in the way of grilles and ornamental gates.

The Cemetery Chapel, by Mr. O. G. Lewis, has a very definite character, being one of the few essays following Gothic precedent. The big problem of the Fourth Year is a building for a School of Architecture.

Modesty amongst the students does not seem to have been a point much stressed in the programme, for one finds that the exhibition galleries throughout are larger than the studios, which in one scheme are quite inadequate in size for any school and placed near the top of the building.

This year the Holland & Hannen and Cubitts prize has been awarded to Mr. A. C. Todd for a competent set of working drawings for a Cinema Theatre, a second prize being given to Mr. G. A. V. Heal, for the details for a Block of Flats.

The set of six-hour sketch designs, which provides a light relief amongst all the very solid achievements, contains many sketches of considerable merit such as the exhibition pavilion for pottery and the Catafalque in a Cathedral.

The drawings submitted for the Rome and Jarvis prizes are again of a high order. Those by Mr. H. T. Thearle, who won this year's Jarvis Scholarship, disclose great skill, particularly in the planning. The subject, a Royal Naval College, was a vast one. The question naturally arises as to whether so much sheer hard work on the part of the students is necessary in the process of the selection of the recipient of these two prizes. No one will dispute that it reduces the number of entrants, for none but the strongest could survive the ordeal. The plan by "Road" appeared to us to suffer very much by the adoption of a curved façade for the main block, a treatment which results in the chapel and dining hall, which are placed on either side of the main axis, projecting in converging directions, thus giving an unpleasant shaped forecourt. The plan by "Light" has much more breadth.

The White Star Line prize for internal ship decoration was won by Mr. R. G. Heal, and the Honan Scholarship, awarded annually by the Liverpool Architectural Society, by Mr. H. Bramhill, whose design for a Motor Bus Terminal Station and Garage gave evidence of considerable thought in planning.

On the whole there can be little doubt that the exhibition easily maintains if not surpasses the high standard of former years.

BOOK REVIEWS

The Panelled Rooms. III.—The Boudoir of Madame De Sérilly. (Victoria and Albert Museum.) Price 1s. 6d.; by post, 1s. 8½d.

Madame De Sérilly and her husband, Megret De Sérilly, Army Paymaster, were close friends of the ill-fated Madame Elizabeth of France, the sister of Louis XVI. The friendship was a fatal one; both were condemned to death in 1794, with twenty-two other conspirators, in an alleged plot to assist Louis. The paymaster followed his friend Elizabeth to the guillotine, but Madame De Sérilly managed to escape.

The boudoir which Mr. Oliver Brackett so ably describes and illustrates in this monograph (second edition) was acquired by the Victoria and Albert Museum in 1869 and is a "picture in little" of refined phases in the arts of painting and sculpture which asserted themselves even when France was rushing headlong to her ruin with horse-racing, gambling, masked balls and scandalous intrigues. This boudoir of 1780, which was built into an angle of the house, No. 122 (Now 106), Rue Veille-du-Temple, Paris, had Claude Nicholas Ledoux for architect; and as to its walls, ceiling, and chimney-piece, was embellished by Rousseau de la Rottière, Lagrenée le jeune, Claude Michel (called Clodion), and Pierre Gouthière. It exemplifies the rivalry—often so keen as to bankrupt the rivals—evoked by enlisting the services of the highest exponents of the Arts Decorative—artists who, in spite of the extravagance of the age, "still preserved a high standard of artistic restraint combined with an almost over-sensitive appreciation of classical accuracy in form and technical efficiency in execution." The boudoir should be seen, book in hand, at the Museum, and then, when we are next in Paris, after seeking out the old house, which is still there, though shorn of its boudoir in the garden angle, we can mentally re-people it with the wits and gallants who, even in the shadow of the guillotine, were so "fickle and fine—and French."

Batsford's New Art Catalogue.

We have received a catalogue from Messrs. B. T. Batsford, Ltd., containing descriptions of over 480 books on Art, Architecture, Building Construction, Engineering, Furniture, Decoration, Social History, &c., and illustrated by 32 pages of photographic reproductions from the books; the artistic cover design, representing seventeenth-century architects, was specially designed by Miss Marcia Lane Foster.

Copies of this comprehensive catalogue may be obtained on application to 94, High Holborn.

Books Received.

THE LAW OF WILLS. By G. F. Emery (London: Effingham Wilson.) Price 2s. net.

THE SOUTH TEES-SIDE REGIONAL PLANNING SCHEME. (London: Jordison & Co., Ltd.) Price 7s. 6d.

THE SOCIETY OF ARCHITECTS. By C. McArthur Butler. (London: 28, Bedford-square.)

ENGLISH HOMES. By H. Avary Tipping. (London: *Country Life* Office.) Price £3 3s.

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ILLUSTRATIONS.

Seamen's Hospital, Greenwich.

On June 23 Viscount Devonport laid the foundation stone of the new buildings of the Seamen's Hospital, which will be known as the "Devonport Nurses' Home," "Outpatients' Department," "Administrative Offices," and "School of Pathology." Sir Edwin Cooper is the architect.

During the years of the war Viscount Devonport collected a large sum of money for the purpose of this work, but owing to many difficulties that had to be dealt with the work has been delayed. The work now commenced is upon a fine site given by the Admiralty for the purpose facing the Seamen's Hospital on the southern side of Romney-road, to which the main front of the Nurses' Home is parallel. The School of Pathology is planned in a separate block near the Home, but having its main front and entrance to King William-street. The Boys' Hospital upon the site will, when handed over to the hospital authorities, be remodelled and the present façade incorporated into the new buildings providing accommodation for the out-patients' department, administrative offices and nurses' recreation room, &c. The two blocks are designed in a manner befitting their situation and purpose. The style of the buildings may be briefly described as in the tradition associated with Greenwich. The materials used are a brindled facing brick for the walls generally, and Portland stone dressings. The main cornice is stone and the roofs of the nurses' home are covered with tiles.

The Nurses' Home has been planned on the site so that the main front lines up with the existing Boys' Hospital, and otherwise on two sides of a quadrangle, which is approached from the main front by an arched opening. The accommodation is in four floors and is intended to provide in one building bedrooms for 130 nurses and rooms for recreation, study and instruction. The builders are Messrs. Foster & Dicksee, Ltd., and the clerk of works Mr. H. Whittaker.

Some Branch Banks.

We illustrate this week some Cheshire branches of Lloyds Bank, carried out from the designs of Messrs. Grayson & Barnish, FF.R.I.B.A., of Liverpool. The one at Hoylake is converted from a pair of small shops. The stone is from Runcorn. The wreaths and keystone were carved by Mr. H. Tyson Smith.

The branch at Heswall is on a corner site where two important thoroughfares cross and the traffic for a small village is singularly congested. It is built of local red stone. On the garden side some half-timber work has been introduced. The photograph shows how easily a privet hedge can destroy the scale of a small garden.

The West Kirby branch was, until recently, a butcher's shop. The verandah shown at the left of the picture was continued about as far as the "s" of LLOYDS; it was shortened by two or three bays. The tiled pent roof was run round the bank on the same plane as the tiles of the verandah. The tiles give a continuity of treatment and separate the old from the new brickwork. The bricks are Jacobean from the Buckley Junction Co. The cement on the frieze is Medusa.

"Woodlands" Nurses' Home, Vanbrugh Hill, S.E., for the Greenwich Union.

This building, which will accommodate on completion 140 nurses, stands on the summit of Vanbrugh Hill, S.E., overlooking Maze Hill Station, and the recreation rooms will possess a delightful view towards London and the river from the south-east. The illustration, from a drawing by Mr. P. D. Hepworth, shows the building from the north-west. The facing bricks are of brown London stocks, with darker picked dressings. The stonework for doors, band courses, dressings, etc., is of artificial stone. Wood casement windows and doors painted white are used throughout. Garden terraces have been formed on the southern side, with retaining walls, also of ferro-concrete. The general contractors are J. Elliman & Sons, Ltd., Beckenham. The hollow tile floors are being executed by Caxton Floors, Ltd., of Westminster. Constructional steelwork is being designed and carried out by Smith, Walker, Ltd., Westminster. Stonework is by the Empire Stone Co., London. White's flush hospital doors of Oregon pine, are used for all the principal rooms and bedrooms. Messrs. William A. Pite, Son & Fairweather are the architects.

A House at Aldeburgh.

This house, designed by Mr. Horace Field, F.R.I.B.A., has not yet been built. It is to be of rough cast, with a tiled roof.

House at Blatchington, Seaford.

This house, which has just been completed for Mr. John Scaramanga, is faced with grey-brown bricks from the Guildford district, with a red plinth and quoins of Bracknell bricks, supplied by Messrs. Thomas Lawrence, who also provided the hand-made roofing tiles. The contractors were Messrs. R. Cook & Sons, of Crawley, and the house was designed and carried out under the superintendence of Mr. Alfred B. Yeates, F.R.I.B.A., F.S.A.

Design for the Decoration of a Dining Car.

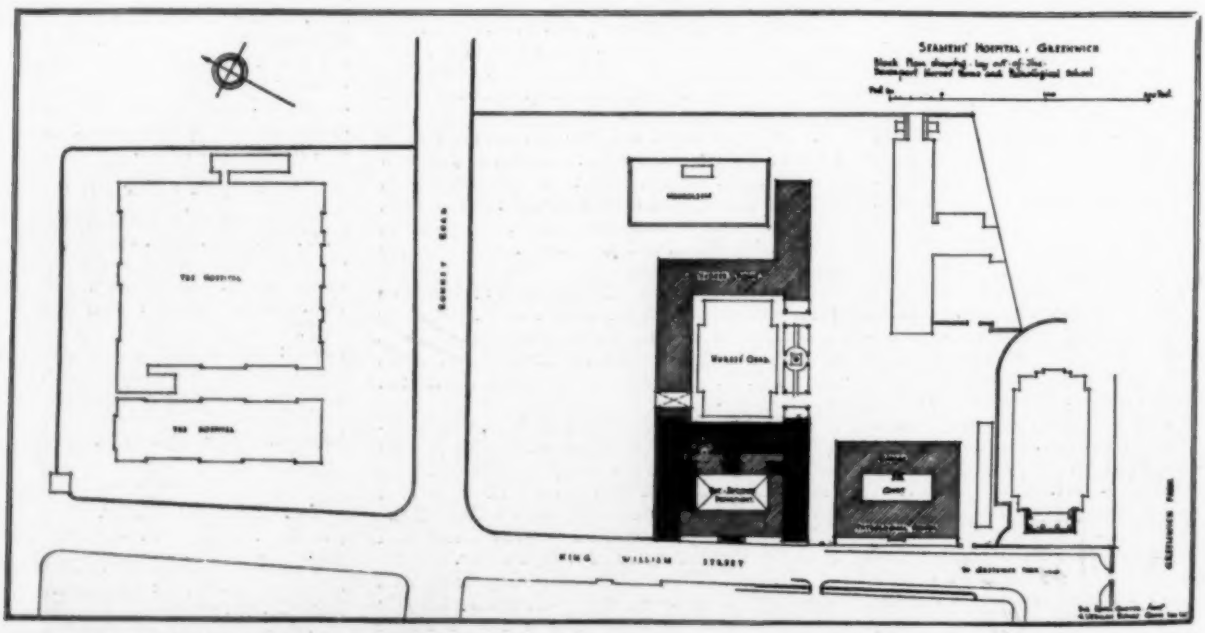
This subject was set for the fourth-year students in the University of London University College School of Architecture as a problem of modern decoration appropriate to conditions of present-day life. All technical information and dimensions were supplied, and full freedom as to the type and style of design was allowed. Mr. J. B. Cochrane, in the design reproduced in this issue, used grey sycamore for all the woodwork and orange velvet for the seats, the colours thus harmonising and the best wear of the materials being assured. A dining car generally costs about £5,000, and a car with this kind of decoration would not exceed that figure.

Design for the Decoration of a Sleeping Car.

This problem was given to the University of London Atelier. The design of a sleeping car has to answer several conditions. A sleeping car may be compared to a travelling dormitory, and passengers expect to find all the comfort of a bedroom for one night's rest. Avoiding projections, placing the fittings in the right position, and providing a pleasant setting for a long journey are the main conditions. The design reproduced in this issue is by Mr. B. R. Ward.

Norwich Shirehouse Extension.

This design, by Mr. Dunbar Smith, F.R.I.B.A., was awarded first place in a recent competition. Owing, however, to the fact that the Corporation has had to surrender part of the site for road widening purposes, it has now been abandoned. The competition design was published in our issue for August 28, 1925.



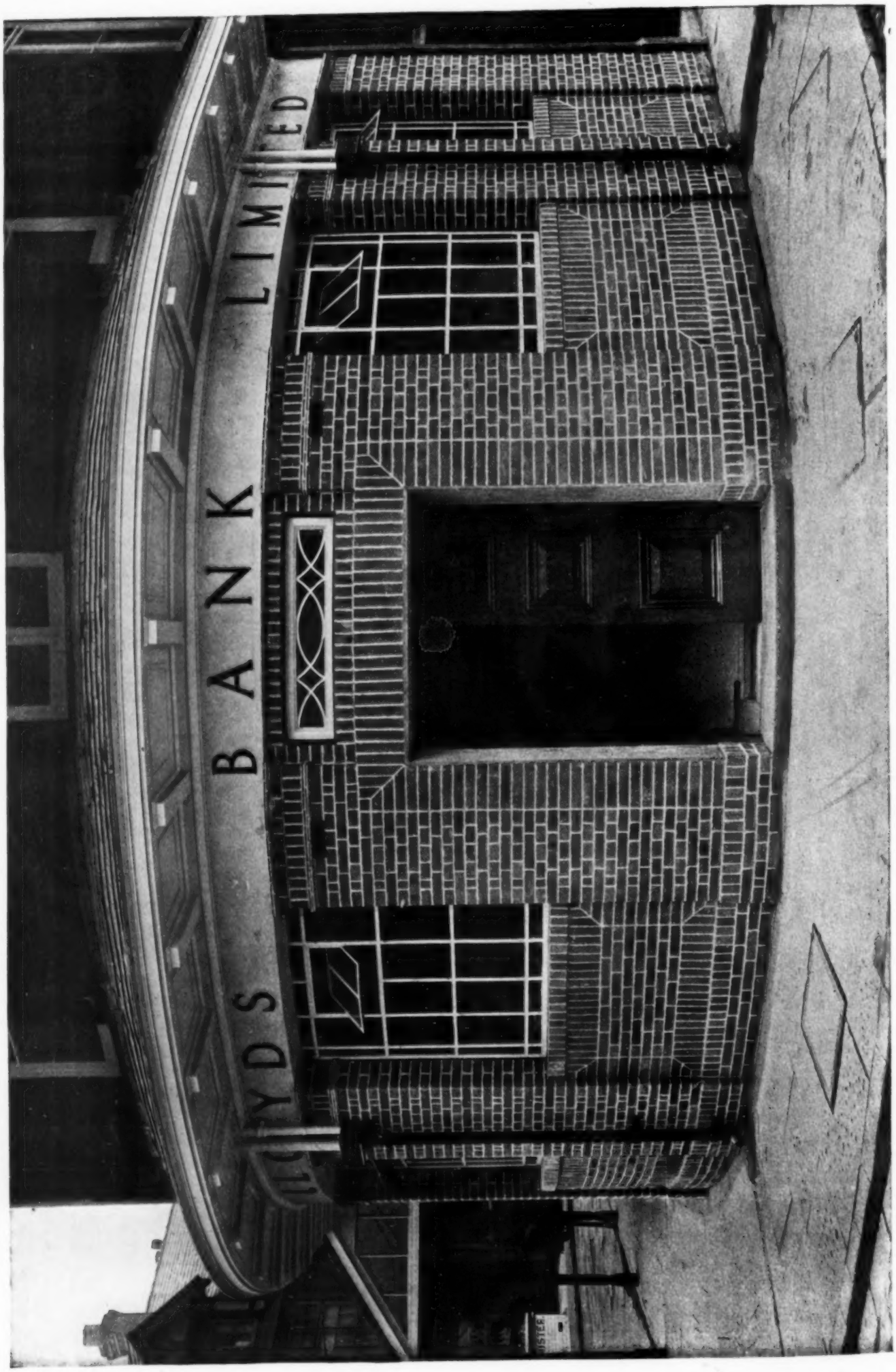
Seamen's Hospital, Greenwich: Block Plan of Devonport Nurses' Home and Pathological School.

SIR EDWIN COOPER, Architect.

MANAGER'S HOUSE.

Lloyds Bank, Heswall, Cheshire.

MESSRS. GRAYSON & BARNISH, FF.R.I.B.A., Architects.



Lloyds Bank, West Kirby, Cheshire.

MESSRS. GRAYSON & BARNISH, FF.R.I.B.A., Architects.

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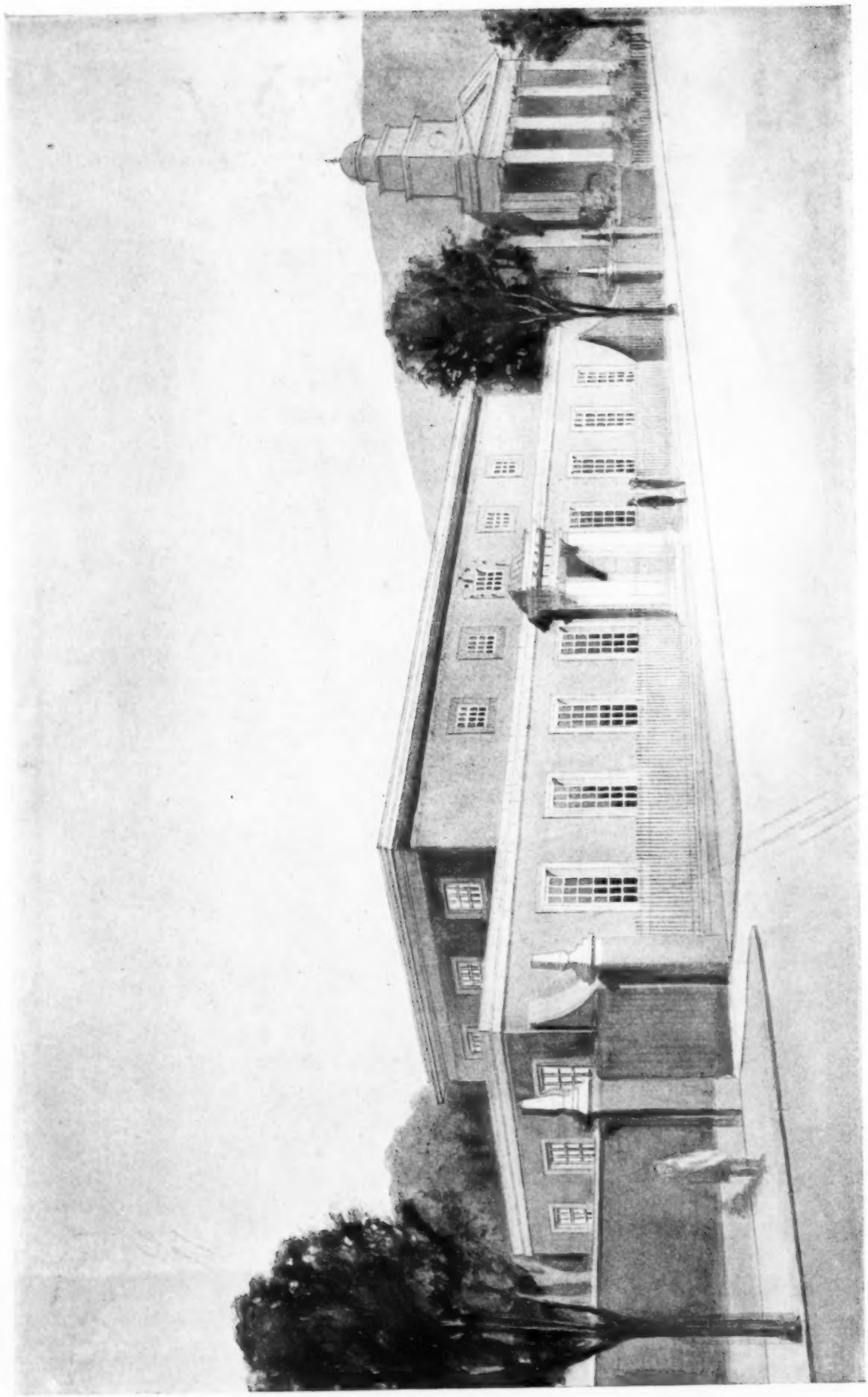
Messrs. Grayson & Barnish, FF.R.I.B.A., Architects.

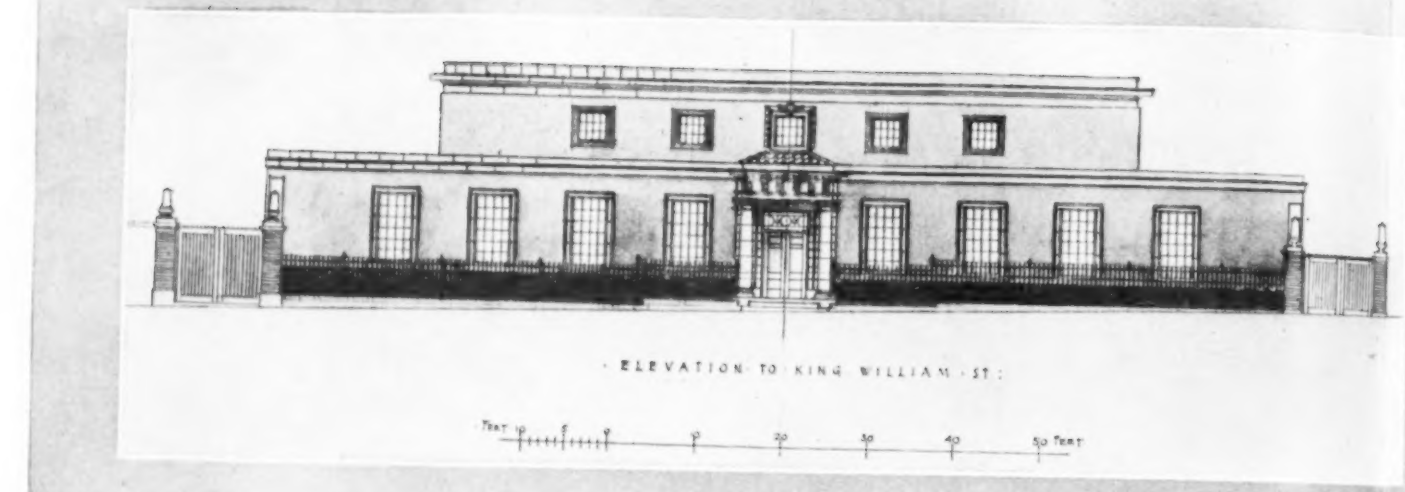
UNIV. OF MICH.

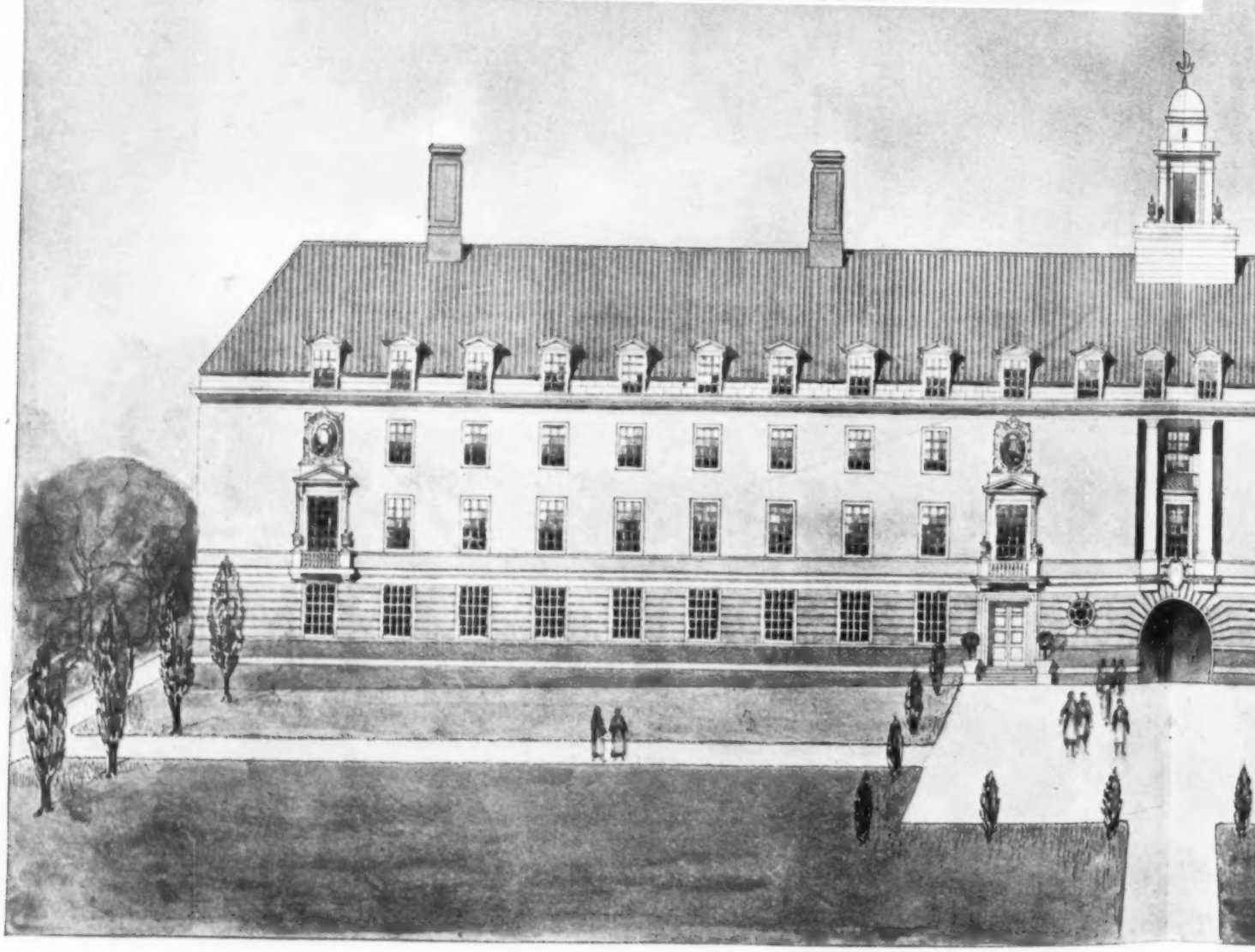


The Devonport School of Pathology, Seamen's Hospital, Greenwich.

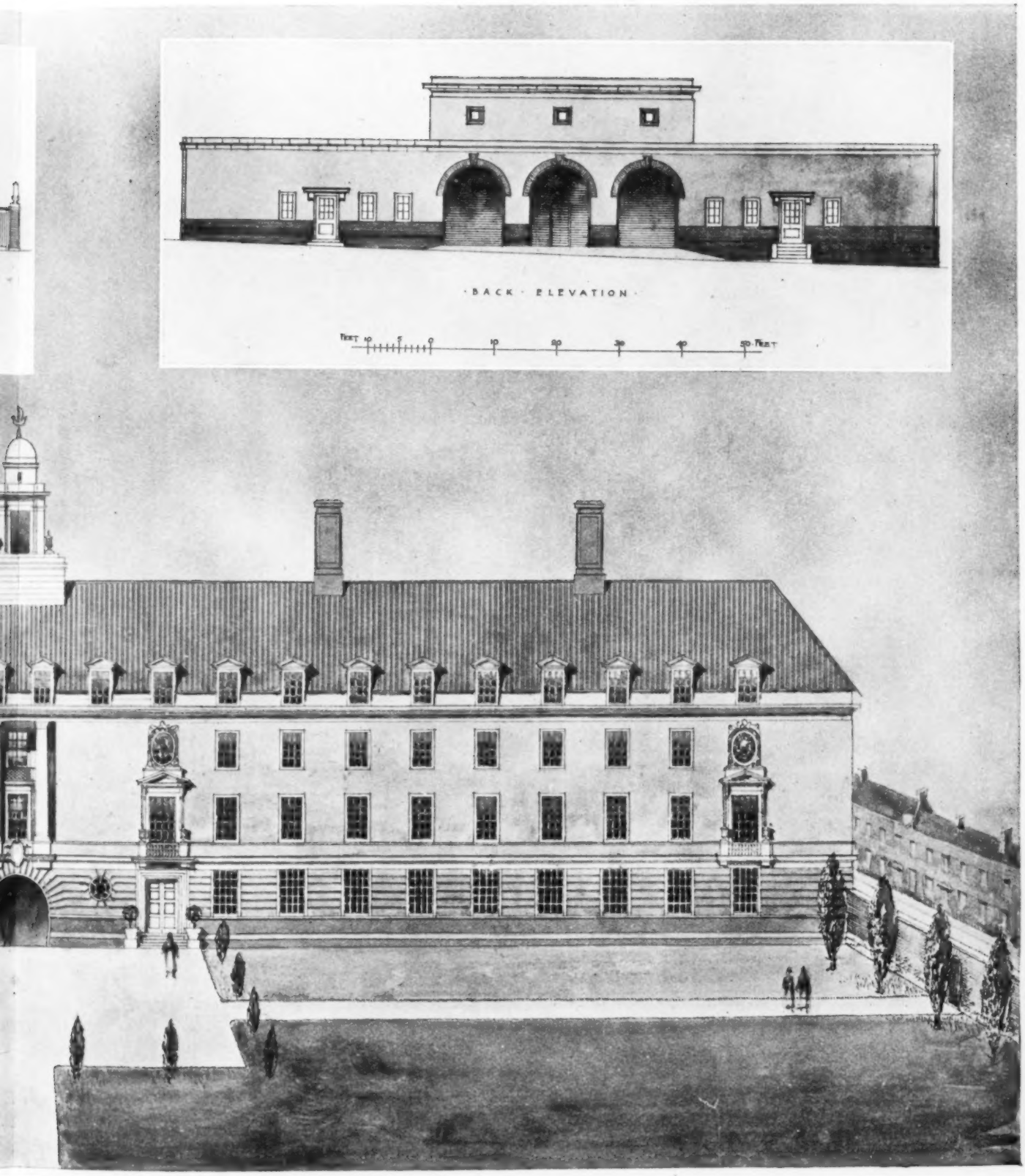
The Devonport School of Pathology, Seamen's Hospital, Greenwich.

UNIV. OF WICH.





THE DEVONPORT NURSES HOME, ADMINISTRATIVE OFFICES, OUT-PATI
SEAMEN'S HOSPITAL, GREE
SIR EDWIN COOPER, ARCHIT



ES, OUT-PATIENTS DEPARTMENT AND SCHOOL OF PATHOLOGY.
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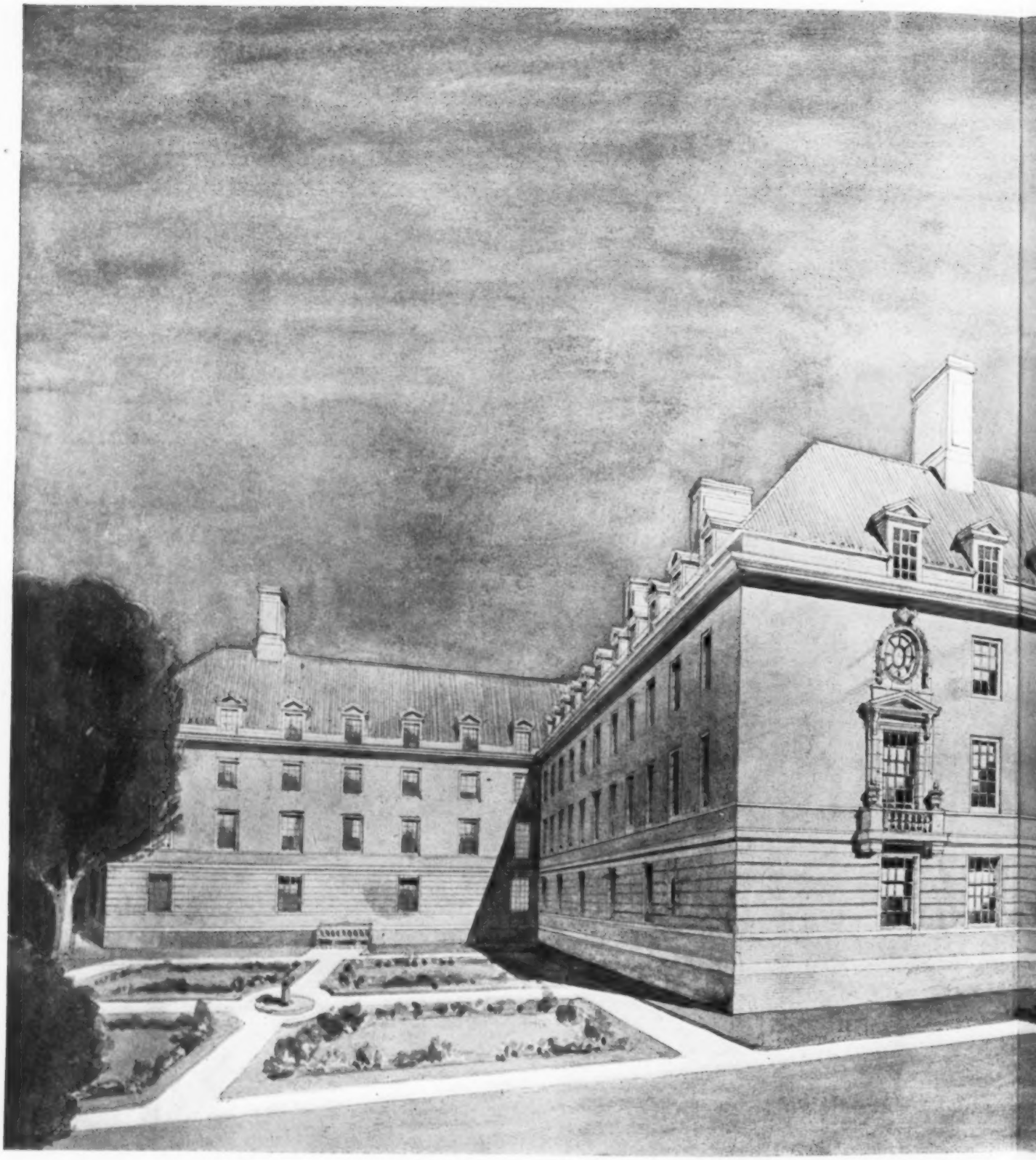

THE DEVONPORT NURSES HOME, ADMINISTRATIVE
SEAMEN'S HOSPITAL,
SIR EDWIN COOPER, A

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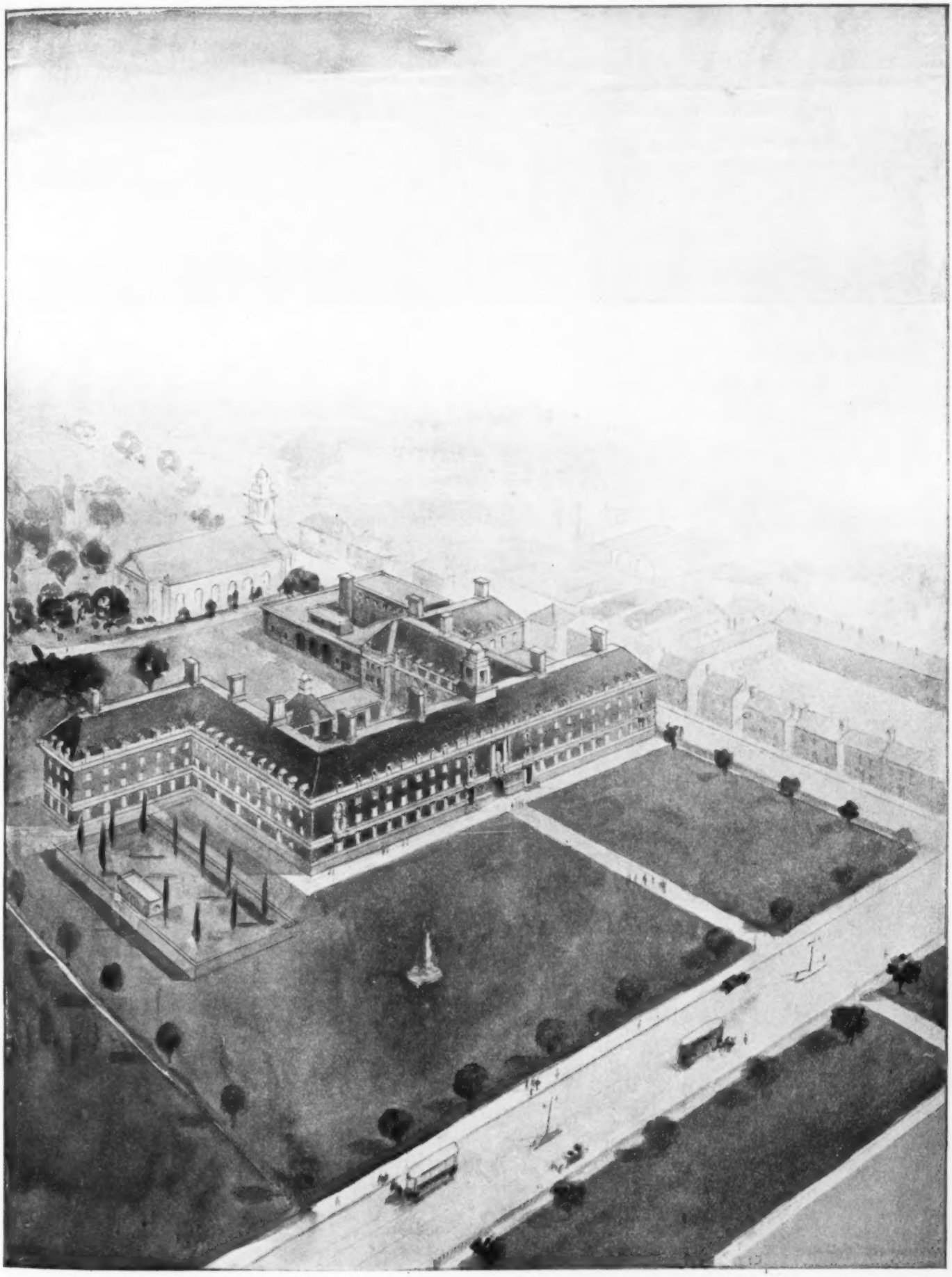
HOSPITAL, GREENWICH.
N COOPER, ARCHITECT.

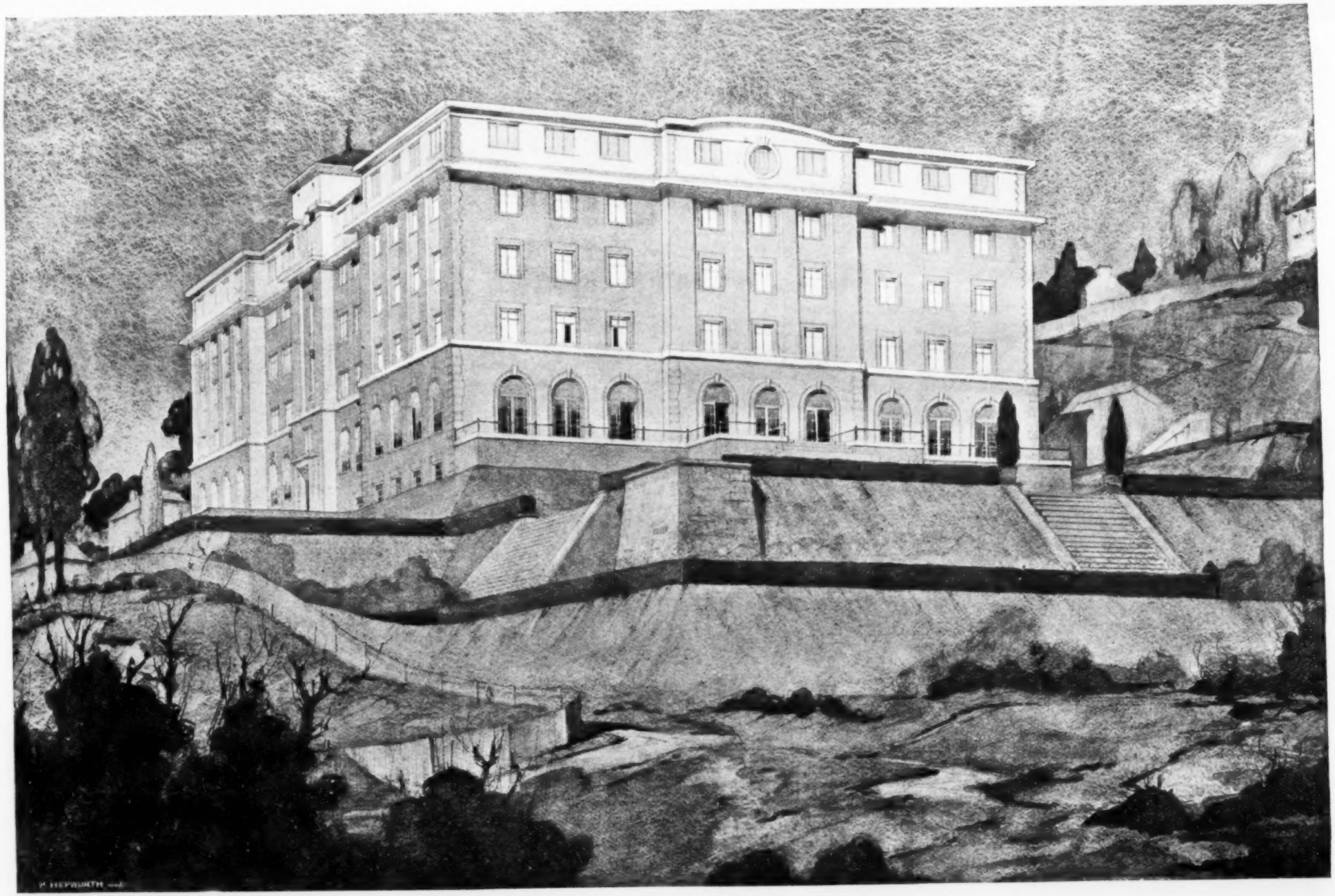
UNIV. OF MICH.



The Devonport Nurses' Home, Administrative Offices and Out-Patients' Department, Seamen's Hospital, Greenwich.

SIR EDWIN COOPER, Architect.

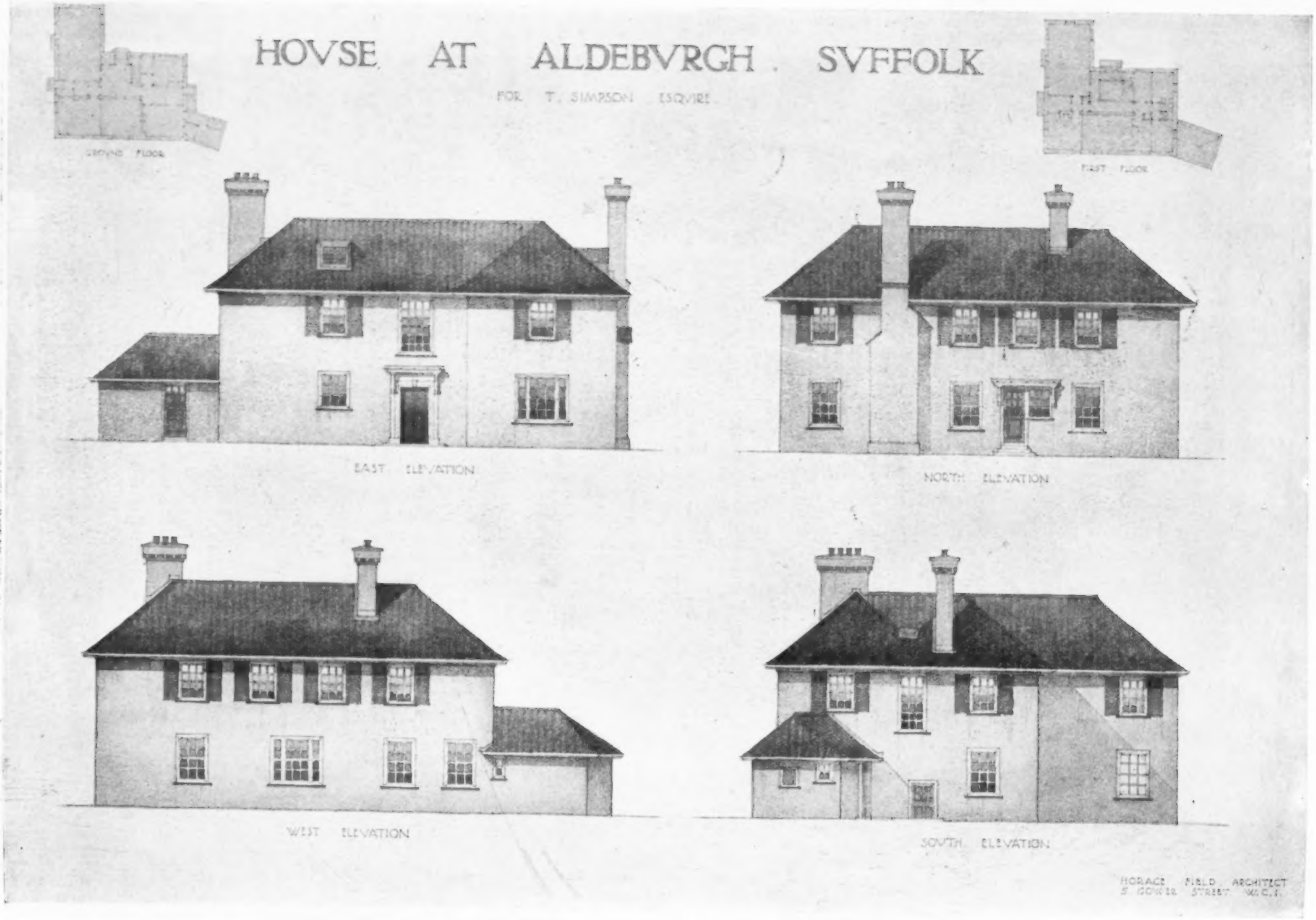
UNIV. OF MICH.



ROYAL ACADEMY EXHIBITION, 1926.

"Woodlands" Nurses' Home for Greenwich and Deptford Hospital.

MESSRS. W. A. PITE, SON, & FAIRWEATHER, Architects.



House at Aldeburgh, Suffolk. MR. HORACE FIELD, F.R.I.B.A., Architect.

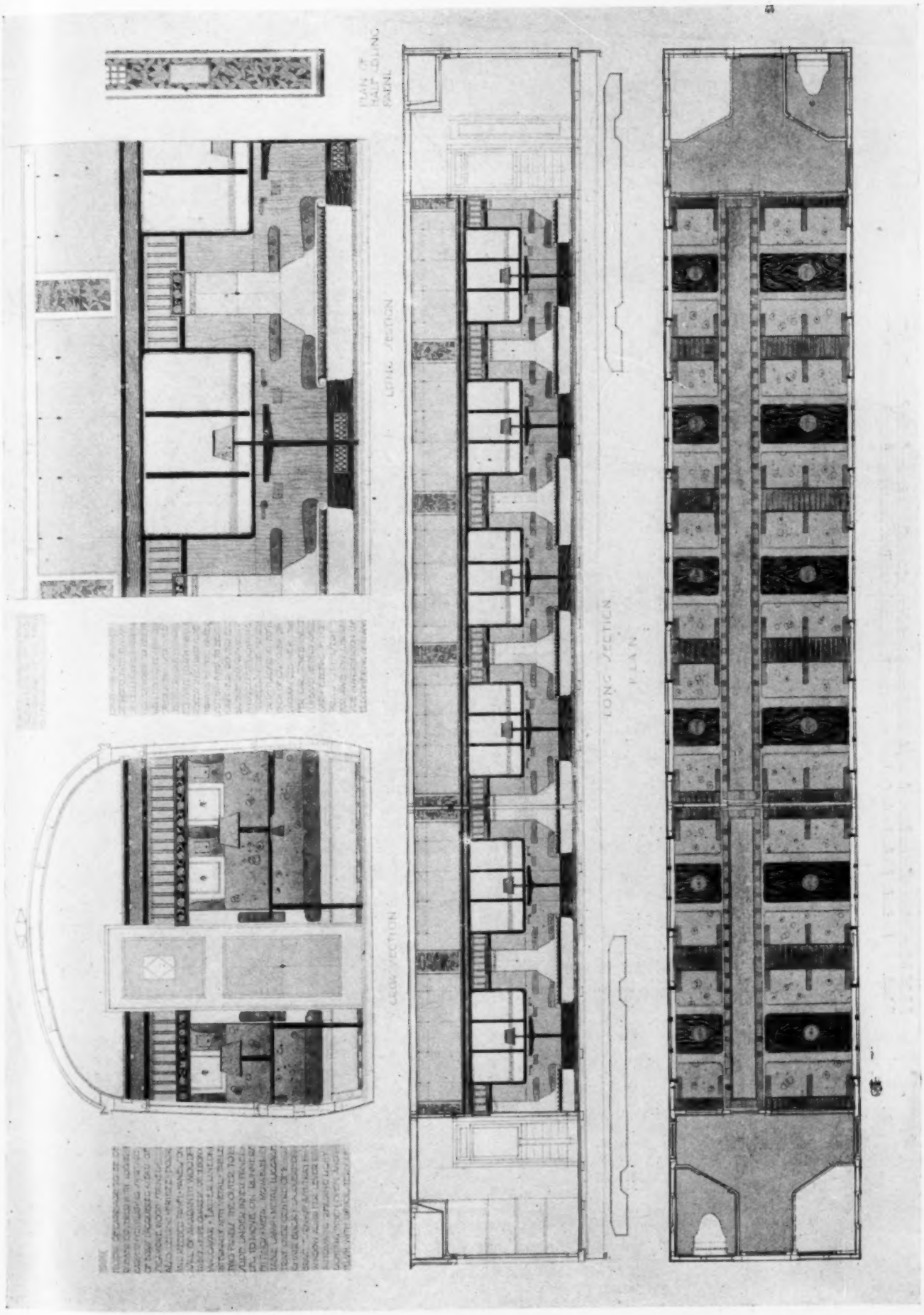
House at Aldeburgh, Suffolk. Mr. Horace Field, F.R.I.B.A., Architect.

House at Seaford.

Mr. Alfred B. Yeates, F.R.I.B.A., Architect.

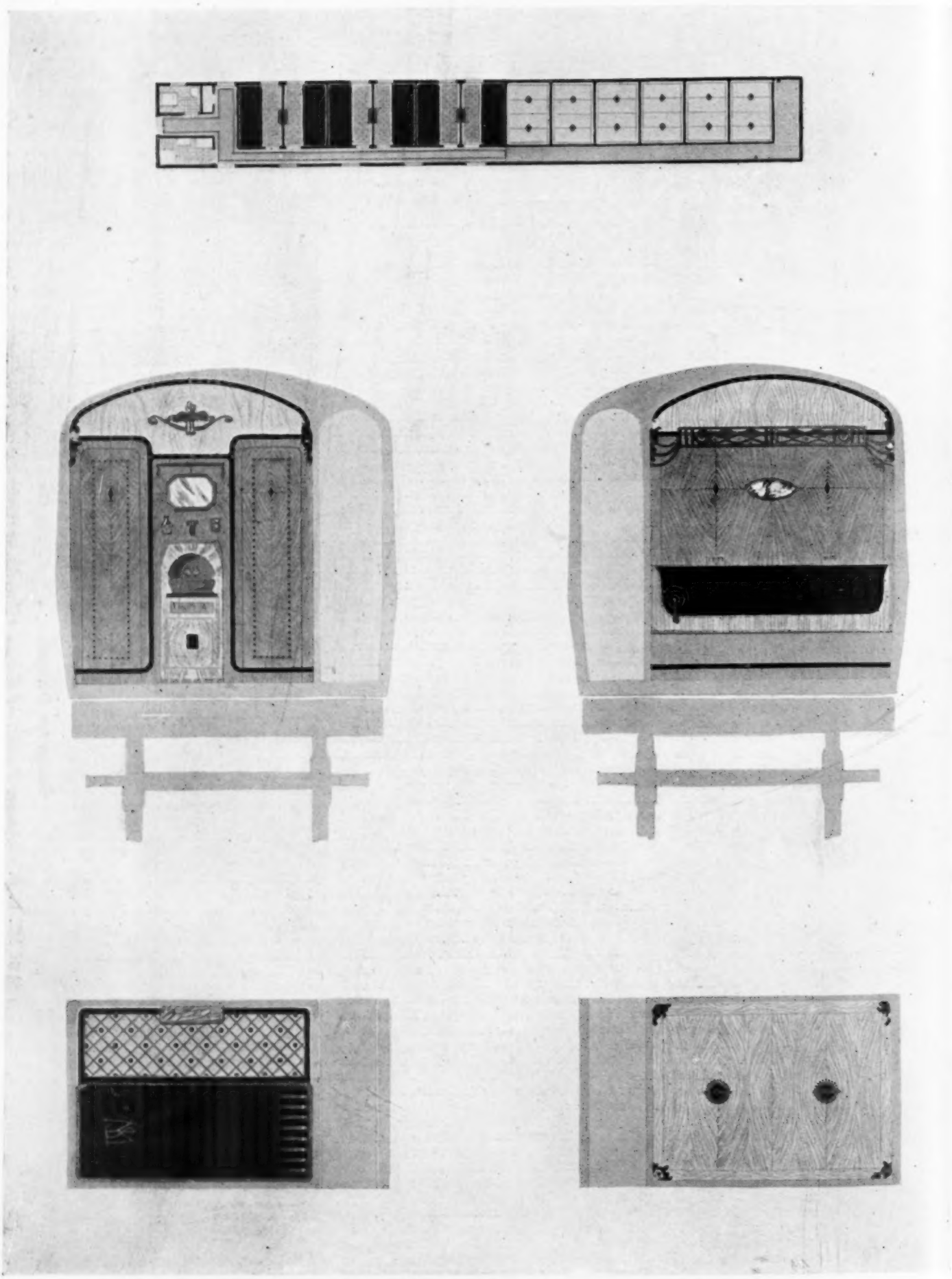
Cricket and Badminton Pavilion, Nottingham.

MR. CECIL A. L. SUTTON, A.R.I.B.A., Architect.



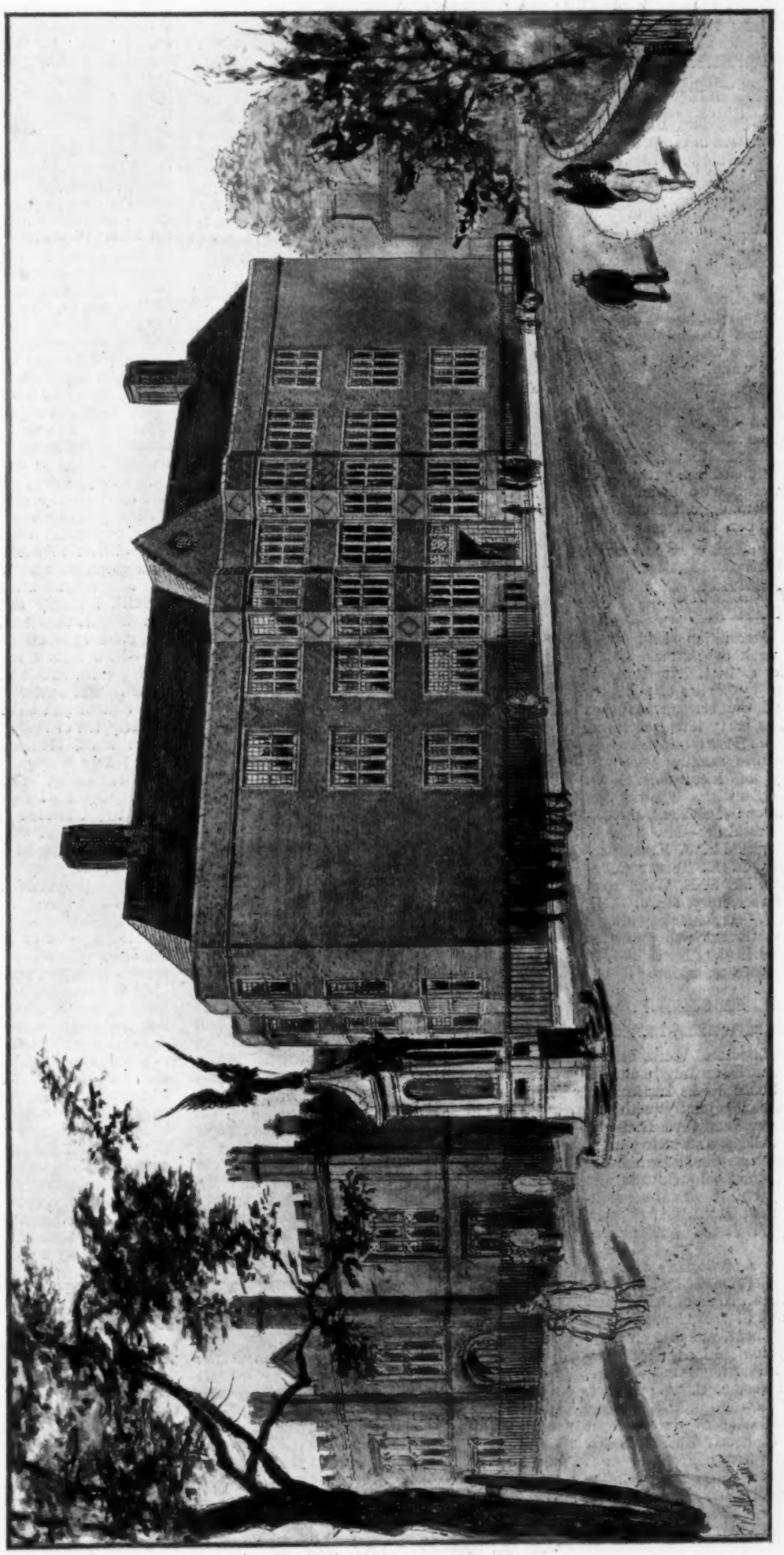
Design for Decoration of a Dining Car.

BY MR. C. B. COCHRANE, Fourth-Year Student, University of London School of Architecture.



Design for Decoration of a Sleeping Car.

BY MR. B. R. WARD (University of London Atelier).



Norwich Shirehouse Extension: Design placed first in recent Competition.
By MR. A. DUNBAR SMITH, F.R.I.B.A.

SOCIETIES AND INSTITUTIONS

ROYAL INSTITUTE OF BRITISH ARCHITECTS.

Science Standing Committee.—"Building Science Abstracts."

By the courtesy of Dr. Stradling, Director of Building Research, information in the possession of the Department of Scientific and Industrial Research upon Building Materials and Practice is placed at the disposal of members of the R.I.B.A. A comprehensive synopsis of the numerous activities of the Department has been placed in the Reference Library, together with copies of *Building Science Abstracts*, issued monthly. The latter consist of a very large number of short descriptive notes of new information upon matters relating to or connected with building and decoration which have been collated by the Department from the technical press of the world. The necessary information to enable any particular piece of new information to be studied at length at its source is added to each note. Some of the information thus rendered available is of course only of very remote interest to architects in practice, and part records of the progress of incomplete research work. Two members of the Science Standing Committee therefore go through the Abstracts upon their receipt and mark any items which appear to be of general and immediate interest.

NORTHERN ARCHITECTURAL ASSOCIATION.

Members of this Association held their annual excursion last week at Barnard Castle and in the Teesdale district. At Barnard Castle they were joined by parties of members from the Tees-side and Cumberland branches of the Association. The party later proceeded by motor coach to Middleton-in-Teesdale, where the annual business meeting was held under the presidency of Lieut.-Colonel G. Reavell, F.R.I.B.A., of Alnwick. The election of officers was as follows: President, Lieut.-Colonel Reavell; vice-presidents—Mr. J. A. E. Lofthouse (Middlesbrough), Mr. J. K. Martindale (Carlisle), and Mr. A. K. Tasker (Manchester); hon. librarian, Mr. F. N. Weightman (Manchester); assistant secretary, Mr. J. F. H. Checkley (North Shields). A satisfactory annual report and financial statement was presented by Mr. G. H. Gray, A.R.I.B.A., of North Shields. A number of new members were admitted.

CARDIFF TECHNICAL COLLEGE.

Exhibition of Designs and Working Drawings.

An Exhibition of Architectural Work, held at the Technical College, Cardiff, on July 15 and 16, was arranged by the South Wales Institute of Architects (Central Branch) jointly with the Department of Architecture and Civic Design at the Cardiff Technical College, and included the following:—Final designs for the Masonic Peace Memorial, submitted by the local architects who were selected to take part in the final competition: Mr. Percy Thomas, F.R.I.B.A. (Messrs. Ivor Jones & Percy Thomas), and Messrs. Willmott & Smith.

A remarkable collection of working drawings which, as the result of efforts made by Mr. W. S. Purchon, M.A., A.R.I.B.A., Head of the Department of Architecture and Civic Design, has been presented to the Department, was also on view. These drawings were presented by the following American and British Architects:—Messrs. Cram & Ferguson, of Boston, U.S.A.; Messrs. Helmle & Corbett, of New York, U.S.A.; Mr. E. Guy Dawber, P.R.I.B.A.; Sir John Burnet & Partners; Sir G. G. Scott, R.A.; Messrs. Ernest Newton, R.A., & Sons; Professor A. E Richardson, F.R.I.B.A.; Mr. L. Sylvester Sullivan, F.R.I.B.A.; Mr. Louis de Soissons, F.R.I.B.A., S.A.D.G.; Mr. Cyril Farey, A.R.I.B.A.; Messrs. Thomas & Jones, Swansea; Messrs. Ivor Jones & Percy Thomas, Cardiff; Mr. T. Alwyn Lloyd, F.R.I.B.A., Cardiff. This collection of working drawings shows the remarkably high standard which is being reached by the leading modern architects and is proving of the greatest possible value in the School of Architecture.

Gift specimens of students' work from the School of Architecture of the Columbia University, New York, were on exhibition, together with examples of a fine loan collection of students' work from the School of Architecture of the University of Liverpool. The drawings submitted in the Preliminary Rome Competition by Mr. J. B. Wride, Rome Finalist, 1926, who is a student in the Cardiff School of Architecture, were also on view.

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS.

Crewe Meeting.

A meeting of this Association was held at Crewe on July 10, when the following members and visitors were present:—His Worship the Mayor (Alderman E. Nixon), Mr. and Mrs. Forbes Campbell, Major and Mrs. Athoe, Mr. and Mrs. E. G. Timbrell, Mr. and Mrs. Tyler, Mr. and Mrs. Darnbrough, Mr. and Mrs. Furber, Mr. Furber, Junr., and Miss Furber, Messrs. Heath, Conlan, Narramore, Downes, Gibbins, Millington, Yates, Kidd, Hall, Mathews, Marshall, Dean, Elsworth, Crabtree, Martin, Taylor, Scholefield, Reeves, Billing, Oliffe, Grant, Gibson, Hassall and Wagstaffe, together with Alderman Badger, Jervis and Darlington, Councillors W. C. White, T. Kelsall and others.

Alderman E. Nixon (the Mayor) welcomed the members, and the President, Mr. Forbes Campbell, opened the meeting in a short speech explaining the objects of the Association and expressing his appreciation of the arrangements made for the meeting at Crewe. The party then proceeded to examine the maps and plans in the Council Chambers, and to inspect the Municipal Offices, afterwards leaving in charabancs to see work of architectural and housing interest in Crewe. A long trip was taken into the surrounding country to inspect Sandbach crosses A.D. 660 (approximately), the ancient church at Astbury, and Moreton Old Hall. Returning to the Municipal Offices, tea was taken on the joint invitation of the Mayor and Mr. E. G. Timbrell (Vice-President), Borough Architect, Crewe.

Architecture—The Municipal Side.

Reading a paper on this subject, Mr. E. G. Timbrell, F.I.A.A.S., said that on the occasion of the first meeting in the provinces of the Incorporated Association of Architects and Surveyors, an opportunity presented itself of dealing with some general questions relating to architecture. Having criticised some of the new architecture of London, the speaker, referring to recent Scottish work, cited the Aberdeen Art Gallery extension as an example of Renaissance architecture having an austere grandeur which was not to be found at the moment in the south. It appeared that the modern British architect was content to live too much in the past. Was it not possible to get away at all from stereotyped Renaissance façades so very common to-day? The Americans had tried to make use of original compositions, particularly on big buildings. It must be admitted, however, that the best type of small country house in America showed British influence.

Dealing with the housing question in Crewe, the speaker said the Corporation had an Addison scheme, undertaken under his predecessor, and two schemes, larger in the aggregate, under the Chamberlain and Wheatley Acts. Addison schemes gave infinitely more scope for architectural treatment than the later schemes, although even they were controlled in a measure by the officials of the Ministry of Health. Attempts had been made in Crewe to avoid monotony by varying types of bay windows, including first floor oriels. The specification for Crewe houses was sound and would stand comparison with most housing schemes in the country. The Municipal Housing Committee and sub-committees had visited many towns and schemes, and had come definitely to this conclusion respecting the specification. It included pitch pine block floors in parlour, adamantine tiles in hall, quarried living room, 2½ in. Cafferata slab partitions upstairs, combination gas and coal range, plentiful supply of cupboards, and in general robust joinery everywhere. The Committee had decided on a rather peculiar layout in certain houses. Using the maximum permissible floor space (950 super ft.), the policy had been adopted of having two large living rooms downstairs; for example, in one block the rooms were 13 ft. 4½ in. by 11 ft. 9½ in., and 15 ft. 1½ in. by 12 ft., respectively, but this had recently been changed to the conventional parlour, kitchen and scullery on a new contract for 100 houses. To prevent, as far as possible, the evil of sub-letting with consequent increased cost of maintenance, the last 50 houses just contracted for and not yet built were smaller, being 750 super ft. instead of 950. These, of course, would be non-parlour. The Committee could have controlled the admission of sub-tenants in a measure, but it was a very difficult matter to bring under rigid control when the number of houses became unwieldy.

The Corporation, wishing to expedite building, had carried out a scheme of concrete houses at a slightly higher cost than brick houses of the same superficial area. It was impossible in that district to build concrete houses cheaper than brick, no matter which particular system was adopted, as bricks were available in large quantities locally and aggregate for concrete was difficult to obtain. The Corporation chose the most substantial method of building—*in situ*—with walls 8 in. thick, the external 4 in. having brick rubble as aggregate and the inner breeze. The exterior finish was a floating of 1 : 1 cement and sand laid by unskilled labour and stippled or rough brushed as a finish. The inside walls, being truer than brickwork, required only a single coat of plaster—a rather thick skimming. The ceilings were of plaster board jointed with plaster and papered.

Having described some of the more notable architectural and other features of Crewe, the speaker, referring to town planning, said it was proposed very shortly to extend the town-planning proposals into the rural districts beyond the borough boundary in order to be sure of effective highway linking. On the new streets proposed in the scheme there would be amenities which were not thought of when the present town was built up.

At a gathering of that sort, continued the speaker, not only must architects be catered for, but, if possible, something of interest should be given to members of the Association who were engaged on such specialities as quantities and valuing. In the two branches of the profession mentioned there were two interesting points which occurred which have not been discussed previously as far as the author knew. He expressed the view that the best way to study building construction was by taking a course in quantities. Working steadily at quantity surveying not only taught that particularly valuable branch of work itself, but was far superior as a means of learning building construction than a systematic course of reading building construction text-books, next to Law surely the driest of reading. The second point suggested for discussion was the present-day viewpoint of valuers as to how to arrive at post-war property valuation. Municipal surveyors were often called upon to value for various purposes, particularly under the Small Dwellings Acquisition Act, and in connection with the purchase of property for town-planning improvements. Since the war the old principle of valuation by rental and outgoings must be considerably modified and any information as to what basis valuers adopted for their work would doubtless be much appreciated.

Discussion.

Mr. J. N. P. Conlan, replying from the architectural side, said he disagreed with Mr. Timbrell in his statement that the modern British architect was too content to live in the past. The fine Scottish work to which Mr. Timbrell had

referred, particularly that of Greek Thomson—probably Scotland's finest architect—was wholly due to copying the designs of the ancient Greeks. The speaker thought that nowadays columns and pillars were mostly shams as they did not function as part of the structure as they did in olden days, and he considered that the defects—which he quite admitted in present London architecture—were due to an attempt to make a good architectural appearance of steel-framed buildings. In America he noted they had been more successful from an architectural point of view, but he put forward the suggestion that buildings, particularly in Washington, were strongly reminiscent of the great Italian renaissance architect, Brunelleschi, in spite of their steel frames.

Major Athoe, replying on the question of valuation, condemned the type of valuer whose only qualification was that of house agent and who had no real knowledge of architecture or building. These gentlemen on some occasions might be found possessing a copy of Inwood's tables and proceeding to value houses by the simple method of jotting down rental value, deducting outgoings, &c., and multiplying nett total by number of years purchase—result: value of house £—— Dealing with assessments, the speaker criticised the system penalising the owner-occupier who made external improvements to his house and was mulcted an extra assessment of £5 per annum, whereas possibly his next-door neighbour—a lover of antiques—panelled out his rooms in choice wood and got off scot free from extra assessment. The speaker went on to explain the very great difficulties relating to the valuing of property needed by a local authority for an improvement, mentioning the case of increased value by diversion of traffic in the making of a new road and the difficulty of getting a fair valuation owing to the Rent Restriction Act.

Mr. Furber, replying from the point of view of the quantity surveyor, stated that he did not agree with the contention that the best way to study building construction was via quantity surveying. He always made his pupils go thoroughly into building construction before they ever touched a piece of taking off.

Mr. Timbrell, replying, reminded his hearers that the Romans were guilty of the use of columns merely for decorative purposes; it was not a disease of the present generation. Replying to the municipal side of Major Athoe's remarks, the speaker stated that in setting out improvement lines such as mentioned in the Public Health Act, 1925, the local authority considered only present-day value and did not deal in "futures." Regarding Mr. Furber's remarks on quantity surveying, he was, of course, giving his personal opinion that he had found the study of quantities had had great effect in testing his knowledge of building construction for its defects, and he still adhered to the opinion that that was the most valuable method of learning building construction.

The President then briefly thanked all those who had helped to make the Crewe visit a success, including Mr. Darnbrough, the honorary district secretary.

Chair of Highway Engineering, London University.

Sir Henry Maybury, Director-General of Roads, Ministry of Transport, has stated that something like £40,000,000 will be spent upon the highways of the country in the present financial year. He proposes to convene a meeting, after the holiday season, for establishing a Chair of Highway Engineering at London University. Between £12,000 and £13,000 has been promised towards it.

Novel Housing Plan.

A disused leather warehouse in Grange-walk, Bermondsey, is being converted into a block of flats and cottages by the Borough Council as part of their scheme for providing accommodation for the surplus population of the district. A weekly rental of about 12s. will be charged for the flats and 19s. for the cottages.

A LIGHT CASE

THERE are, as we pointed out in our articles last year, very many fewer decisions relating to light since in Colls *v.* Home and Colonial Stores (1904, A.C. 179) the test of nuisance was applied by the House of Lords, and of late years the questions raised have mainly been in connection with *quia timet* actions and the point whether an injunction mandatory or prohibitive should be granted or whether it was a case for damages.

In *The Times*, July 13, a case is reported which is of some interest.

The plaintiffs were the owners of freehold property known as the "Joiners Arms," which fronted to the north on Darlington-street, Wolverhampton, but to the south fronted on an alleyway on the other side of which was a large garden, over which unobstructed access of light had been enjoyed, as the Court found, to one window on the ground floor. The claim related to three windows, but the Court, for reasons not stated in the report, found that no case could be made out except as to the window on the ground floor. The "Joiners Arms" was no longer a licensed house, and the site would sooner or later be developed by the construction of buildings for other purposes. The defendants were erecting a building which would attain a height of 42½ ft., distant 5 yds. from the window in question and extending right across the plaintiff's premises, depriving the room in question of all direct light from the south and leaving uninterrupted only the light from the south-west. This building, the report states, had reached a height of 30 ft.

The Court held that it was proved that if the defendants erected their building the room lighted by the ground floor window would not have sufficient light for ordinary use and enjoyment. It was argued on behalf of the defendants that even if the room was inadequately lighted according to ordinary standards, a different standard must be applied in the case of a room situated in a manufacturing town such as Wolverhampton, but the Court intimated that it knew of no decided case which had established the proposition that when an obstruction creating an actionable nuisance was proved a different standard should be applied according to locality; the standard of light required to obviate a nuisance was an absolute standard and the plaintiffs had established a cause of action.

This is a very important finding, and we may comment further on the case when it is more fully reported; *prima facie* it would appear that now the test has been laid down to be whether a nuisance is created there cannot be degrees in that nuisance, or as the learned judge put it in the case we are considering: "The human eye requires as much light for comfortable reading or sewing in Darlington-street, Wolverhampton, as in Mayfair." It was only in the old days before the decision in Colls' case when the Courts had held that the plaintiff was entitled to ALL the light that a difficulty arose as to different standards in different localities. Thus Lord Halsbury, in Colls' case said, as we stated in our second article, "If that were the law it would be very far reaching in its consequences, and the application of it to its strict logical conclusion would render it almost impossible for towns to grow and would formidably restrict the rights of people to use their own land."

The next question the Court had to decide was whether in the case we are considering an injunction should be granted or the building should be allowed to proceed and damages be awarded. The Court intimated that in considering the damages the diminution in the value of the whole site would have to be considered (Griffith *v.* Richard Clay & Sons, Ltd., 1912, 2 Ch. 291; *The Builder*, May 24, 1912; Wills *v.* May, 1923, 1 Ch. 317; *The Builder*, November 30, 1923, cases we considered in our thirteenth article), and the damages would be very substantial and difficult to estimate, therefore the case fell outside the working rule laid down by Lord Justice A. L. Smith in Shelfer *v.* City of London Electric Lighting Co. (1895, 1 Ch. 287; see our eleventh article), and an injunction should be granted. The rule laid down in Shelfer's case was that damages might be substituted for an injunction when all the following elements were found in conjunction: (1) The injury was small; (2) capable of being estimated in money; (3) capable of being adequately compensated in a small sum; and (4) where an injunction would be oppressive.

The further question then arose should the injunction be mandatory, and here, as we showed in our tenth article, the conduct of the parties is an element to be considered. The learned judge found that the defendants began a building which they must have known would cause actionable and serious damage to the plaintiffs; that they never consulted the plaintiffs, and when complaint was made intimated their intention to proceed, and continued to do so until stopped by interlocutory injunction, conduct which approached reckless disregard of another person's rights, and in these circumstances a mandatory injunction should be granted. It was agreed that if the building did not exceed 23 ft. 6 in. in height the plaintiffs would be adequately protected, and therefore the order was made that it should be pulled down to that height. This is only a brief notice of this case, but it will indicate that very interesting points were raised and decided.

COUNTRY HOUSE FIRES

Country house fires were considered by the Institution of Fire Engineers at a conference held recently in the Connaught Rooms.

Chief-Officer T. Breaks (Sheffield) said that a host of well-meaning critics had omitted to urge the necessity for an arrangement being made by every owner of a mansion with a thoroughly up-to-date fire-fighting organisation.

Superintendent C. W. Gould (Portsmouth) spoke of the danger of exposed oak beams in old chimneys. Many fires had occurred in unoccupied mansions, and as there was a possibility of incendiarism the police should keep special observation on such houses.

Mr. S. G. Gamble (late second officer of the London Fire Brigade), said that he believed electricians were coming to the conclusion that the life of the majority of electrical installations was fifteen years. The extent to which radiated heat was responsible for fires was a matter which required scientific investigation.

Chief-Officer John Dans (Croydon), thought the institution should give a lead to architects, estate agents, and bailiffs as to what they should do to prevent fires. Those in charge of houses should be advised to have them efficiently surveyed.

The conference passed a resolution, proposed by the President (Firemaster A. Pordage), that the institution, viewing with serious concern the sequence of disastrous fires in country houses, emphasised the need of adequate and efficient fire protection in rural areas as well as in urban centres, and urged the Government to give effect to the recommendations of the Royal Commission on fire prevention and the co-ordination of established fire brigades.

Chief-Officer Andrews (Luton) inquired whether, as the institution was primarily formed to raise the status of the fire services, it was the intention of the council to formulate a standard test for fire appliances to which manufacturers should conform?

The President said the matter would be brought before the council.

Brighton's New Estate Purchases.

Brighton Town Council has approved the purchase, at a cost of about £10,000, of the Saddlescombe estate, near the Devil's Dyke. The estate is 680 acres in extent. The Council has also agreed to purchase for £6,600 Patcham Place, an old Georgian house with 22 acres of woodlands, standing on the main London road, three miles north of the borough.

ELEMENTS OF DESIGN AND THE TEACHING OF BUILDING CONSTRUCTION

AT a Conference of the Schools Committee of the Board of Architectural Education held at the Royal Institute of British Architects on Wednesday last with the representative teachers of building who are in London on a course arranged by H.M. Board of Education, Professor A. E. Richardson, F.R.I.B.A., read a paper on this subject, in the course of which he made the following points:—

(1) THE ATTITUDE OF THE TEACHERS.—No matter from what class the students were drawn, the best results could be achieved by relating the theories of construction to actual building schemes. There should be a closer reference to plans. Not only should students be encouraged to a knowledge of bricks, timber, tiles and masonry, but examples of contemporary planning should be taken as illustrations of building practice at its best. Every school should have a set of architect's plans for reference. There should be exercises in assembling masses of materials. Lectures should be given on the right way to treat finishings, and these talks might be accompanied by illustrations of examples of building which in every respect were beyond reproach. These methods had been followed at the Central School of Arts and Crafts.

(2) THE OBSERVANCE OF REGIONAL CHARACTERISTICS.—Every county in England during the past four hundred years had evolved building traits, especially in domestic work, which were purely local. In other words, the right use of local materials had produced a vernacular suited to the district. The railway upset this pleasant evolution, and that which the railway left unspoiled was now endangered by the employment of substitute materials. The use of local materials must be more closely observed. In this the past offered many lessons. There was no reason to be slavish and to indulge in copy-book exercises. The broad principles alone needed consideration. It was unfortunate that the ordinary treatise on construction ignored such essentials.

(3) THE LOGIC OF STRUCTURAL PLANNING.—The plan was the determining factor in teaching the elements of design and construction. It had been argued that we knew everything that was to be known about structure. But did we? There was so much crude building as to cause doubt. If teachers of construction went about their several tasks in the right way they would lead their men to think of planning and construction as providing the very fibres of fine building. Let them begin with simple exercises, constructing circles, squares and octagonal forms in brick, stone or timber. Let the students follow on by roofing these geometrical figures, and so proceed to combinations of forms. If a student planned and detailed the construction of one small house during his term of studies he would have gained a better idea of the theory of building than another who prepared an endless number of plates of constructional details. Here again, lectures on the great buildings of the past, describing the anatomy of the plans, would be of the utmost value.

(4) FINE BUILDING.—The aim of teaching construction was not wholly achieved if the issue of distinguished building was ignored. By fine building was meant work which was humane, orderly, reasonable and economical. How often was a wall considered merely as a wall, a window as a glazed opening, a doorway as an entrance, without regard to the grouping of these parts, or their relationship the one to the other. Ornament, bay windows, top-heavy chimney caps, and awkward roofs did not make for finesse in building. Neither could we consider plate glass, glazed brickwork or Welsh tiles out of environment.

(5) GROUPING AND AMENITIES.—Teachers of construction must not consider their duties complete unless attention was given to the elementary principles of grouping. Every teacher should be a town planner. His conception of the structural system should apply to the arrangement of houses in groups. He should preach to his men who will be builders in the future, urging the necessity of building on sites away from main roads leading into towns. He should dwell on the importance of preserving local landmarks, and should encourage his men to regard the grouping of houses and cottages as a moral responsibility.

(6) PRIDE AND SIMPLICITY.—People liked to imitate that section of the social strata which they considered immediately above them. When, as at Welwyn, the houses were kept simple it was not the artisan who looked upon the result with favour, but the highbrow fraternity. How different things were a hundred years since. Many a shoddy nest of cottages recently erected in every county was foredoomed to become a country slum within the next decade or so. People have no real pride in shoddy building.

(7) THE VALUE OF THE EXTERNAL QUALITIES OF OLD WORK AS A GUIDE TO MODERN EXPRESSION.—It was clear that whether we acknowledged our indebtedness to the past or not, we were continually being influenced by its internal evidence. The danger was that some fell in love with the past to such an extent that they become mediævalists or Georgians. Then we had artists skilled in faking and reproducing. In some ways architectural practice was strangely akin to the trade which flourished in the Tottenham Court-road and elsewhere. Old buildings exactly reflected the tendencies of the age in which they were produced. They carried the assay mark of Gothic, Tudor or Classic. We were prone to admire them for their architectural character alone. But investigation proved that the treatment of the material, the pitch of the roof, the weathering of the eaves, the regional treatment of detail, to be of a more lasting order than the twirls and conceits of style. He was not going so far as to say that style did not blend with regional traits. The point he wished to make was that regional traits were superior to acquired style. Therefore the treatment of material in masses offered a constant which never became old-fashioned.

(8) CRAFTSMANSHIP AND THE MACHINE.—A hundred years since craftsmanship was general. The art of the Victorian age represented the gradual decay of the small craftsman. By the year 1851, the machine had gained the victory. Then followed the isolated efforts of Ruskin, William Morris, Philip Webb, and others, to revive handicraft. You could have good craftsmanship to-day if you were prepared to pay for it, just as you could obtain rare fruits out of season. The newer craftsmanship belonged to the machine. It was precise in its parts and has a rigidity of expression in sympathy with this age. We had to admit the machine, and that meant the suppression of the individual. Between the architect, with his drawing board learning and the machine with its smoothing capacities, building in some manifestation had the quality of starched linen. Mr. Spooner, however, had shown us that joinery could be produced to-day the equal of antique work. It was still possible to get splendid bricks, and the treatment of stone was still understood. Allowance must be made for the vast scale on which building was undertaken to-day. Teachers must explain the difficulties to their students and tell them that building did not finish with the drawing board.

(9) STANDARDISATION OF DETAIL.—Contrary to expectation, this was a good quality. All the great periods of building had been noted for the uniformity as well as the excellence of the detail. If we studied the eighteenth century, early, middle or late, we should find the joinery of each period standardised. The six-panelled door, introduced by Inigo Jones, remained as a constant form of design from the time of Charles II to the middle of the nineteenth century. Joinery of standardised design was at its best at the end of the eighteenth century. He had never seen better joinery than that worked for Sir John Soane and Henry Holland. Standardisation as a principle admitted varieties which gave piquancy and individuality. Now, was it not strange that most books on construction avoided this issue? Some writers on the subject of construction had been so eager to meet current fashion that they had evolved a system foreign to the best principles of building.

(10) REPRODUCTION OF PERIOD WORK TO BE AVOIDED.—This point had already been partially dealt with. Construction did provide a key for advancing the character of joinery, masonry, and brickwork, as it did for design in general. Essentially was this the case when the modern conditions of planning were observed. "You are not debarred from studying old work," said the speaker, "but don't stage it, otherwise we must all dress in costume."

(11) THE REVIVAL OF THE APPRENTICESHIP SYSTEM.—No trade could expect to flourish without a constant supply of recruits. The building industry, the oldest in the world, took in by far the greatest number of unskilled people. Guilds, Polytechnics and other teaching centres in large towns had done much to remedy the evil. In the remote country districts the apprenticeship system had almost died out, with the result that the stream of young artificers, who formerly came into large towns for work, had practically ceased. Boys preferred to become fourth-rate clerks or shop assistants rather than lose esteem by learning a trade. Teachers of construction had it in their power not only to train men in the subject of construction, but to advise on the nature of a calling. A boy equipped with theoretical knowledge would make a better artificer if he combined his school work with the handling of tools. Here was a point worthy of the attention of the T.U.C.

(12) THE SOCIAL ASPECT.—If building generally was good when the population consisted of 12 millions, why did it fail to please when the population was 40 millions? Here was a subject for the Institute Essay Medal.

(13) CO-OPERATION OF BUILDING AND FINANCIAL INTERESTS.—Regarding small property, collective effort was to be preferred to individual enterprise. The old system which permitted a carpenter working with a fourth-rate solicitor to become a man of property was not extinguished by the war. It was true we did not suffer quite so acutely from catalogue building, but, on the other hand, the rise of cost had brought forth other evils which were just as bad. Builders to-day were not prepared to build houses for wise men to live in. Municipal enterprise was a good thing. The example of the London County Council was to be admired. The main issue was the control of designs. He submitted that the local authority, often advised by local surveyors and engineers, did not fulfil all the obligations required. The drainage might be good, but the pictorial effect was anathema. Although you may control taste by training workmen, you cannot entirely influence public freedom.

(14) THE COMMUNAL SENSE.—Like craftsmanship old village life was giving place to a fusion of interests which broke down local boundaries. Each new development, whether in the suburbs of London, or of any great city, represented an attachment of interests rather than a new village in embryo. It was like the design of a patchwork quilt in which fragment was added to fragment without regard to intrinsical design. Very often new centres were planned without shops or any other interest than the houses. There was, moreover, no consideration given to space for legitimate expansion. Surely it should be a distinction to live in a new centre, and not merely a penance to be attached to another collection of streets. Such developments, considered largely, should all form part of the system of reform. They should be educational systems in themselves.

(15) Lessons in small house building were to be found in Kennington, in Welwyn, in Hampstead, and in Letchworth. The best of the small houses enumerated were distinguished by reasonableness. The houses were simple, the windows justly proportioned, the doors object lessons in simplicity. The detail had been standardised. In addition some of the houses had been grouped in threes on terrace lines.

SPECIFICATIONS.—XXVII

By H. V. MILNES EMERSON, A.R.I.B.A.

COPPER TUBES—*(continued).*

THE following connections are on the market and can be obtained in brass or gun-metal alloys, to fit tubes ¼ in., ⅜ in., ½ in., 1 in., 1¼ in., 1½ in., and 2 in. diameter:—Straight coupling, bent couplings, valve with couplings, coupling for lead, straight connection, bent connections, female bent connections, bent flanged connection, female straight connection, obtuse bent connection, obtuse bend, return bend, cross-over bend (for crossing-over another pipe), tee, curved tee, return tee, boiler tee, cross tee, female branch tee, tee with bend, tees for tub and sink fittings, valve adapter, reducing sleeves, reducing collars, flanged pipe bands, batting pipe bands, screw-down stop-cocks.

The foregoing description of copper tubes and fittings will, no doubt, prove of service to those who contemplate using this material for water services. Copper tubes are largely used in the North and Scotland, and the relative cost is cheaper than lead, as shown by Mr. J. H. Barns in his article in *The Builder*, July 2, page 22, and a letter from Mr. James Thomson in last week's issue, July 16, page 82.

Item.

351. The hot and cold water service tubes to be of solid drawn copper of the weight and gauge, or thickness, specified and of a purity of not less than 99.7 copper, or in accordance with the B.E.S.A. standard specification.

The whole of the joints to be made with . . . or other approved joints and connectors, and the pipes to be attached to the wall and other surfaces with approved pipe bands or hold-fasts.

352. SERVICES (to small houses and flats).—A separate supply to be taken to each house.

Lay on water from brass screw connection fixed in main by water company to cisterns in houses with ½ in. (or ⅝ in.) solid drawn copper tubes, 18 S.W. gauge, and provide and fix to each cistern a ½ in. high pressure ball valve with copper ball and stem. The rising main to cisterns in flats to be ¾ in. solid drawn copper tubes, 18 S.W. gauge, with ½ in. copper service branch tubes to each cistern and ½ in. ball valve.

Take ½ in. copper supply from main to each sink and bath and supply and fix over each ½ in. brass bib cock.

Stop Valves.—Provide and fix brass high-pressure screw down stop valves one on each rising main just inside each house and blocks of flats and one on each descending service next cistern.

Cisterns.—Provide in roof of each house a 40-gallon cistern and in roof of each block of two-story flats a 100-gallon cistern (to serve two flats), all of 14 gauge galvanised iron with angle iron to top, bottom and angles and internal stays and stiffeners as required, or line the wood cistern provided in "Carpenter and Joiner" with 22 S.G. copper with seamed and brazed or riveted and soldered joints. Perforate for supplies and overflows as required.

Fix cisterns where directed in each house or block of flats, as above, and fit with ¾ in. brass boiler screws and ¾ in. galvanised-iron tubing from galvanised-iron cisterns, as overflow through roof and to copper cisterns seamed and brazed or riveted and soldered copper outlet, and connect to ¾ in. copper tube, as before specified, and carry same as overflow through roof.

Service from Cisterns.—Lay on the water from cisterns in each house and flat with brass cistern connectors or copper outlet and ½ in. copper tubing. Take ¾ in. service to each hot-water tank and ½ in. to each flushing tank.

Hot-Water Service.—Run ¾ in. solid-drawn copper tubing, 18 S.W.G., flow and return pipes from boiler of ranges or stoves and connect to hot-water tank. Drill and tap boilers and connect return and flow pipes thereto with back nuts to the connectors.

Provide and fix in positions indicated a 30 gallon hot-water cylinder, 18 S.W.G. copper, on 1½ in. by 1½ in. T-iron bearers built into wall with ¾ in. copper expansion tube turned over cistern in roof.

Lay on water to bath with ¾ in. copper tubing and ½ in. copper tubing to lavatory and sink. Supply and fix on flow pipe near boiler a dead-weight safety valve.

353. SERVICES (TO LARGER BUILDINGS).—Reference should be made to Items 330 and 331, substituting copper tubing of the sizes and gauges shown in the foregoing tables for the lead and iron pipes specified in these items.

Item **Fire Appliances.**

354. FIRE MAINS.—Take from the Water Company's main in . . . a . . . diameter supply for fire purpose and continue to . . . with pipes 3 in. diameter above . . . floor. A main valve of approved weight and quality, having a cast-iron body and wheel with gun-metal valve seats and spindle, to be fixed where directed. This valve must be approved by the Water Company, and if required the builder must pay the Company's charges for carrying out the whole of this work.

A branch for a firecock to be supplied on each floor in the positions indicated, and the height of same to be 2 ft. 3 in. from floor to centre of branch connection in each case. The branches to have faced flanges 6½ in. diameter, with four holes to take ⅝ in. diameter screwed studs on a 5 in. circle, which, with ⅛ in. wire woven rubber insertion ring for the joint, is to be supplied by the builder.

Allow the p.c. sum of . . . for the firecocks, hose, branch pipes and boards with brackets for hanging the hose, to be obtained from . . . the builder, to allow for carriage, profit and fixing, including the supply of any nuts, bolts or screws that may be required.

The rising main to be continued about 12 in. above the highest firecock and finished with a rounded cap bolted on. Provide and fix to the latter a 4 in. Bourdon's or other approved pressure gauge with ¼ in. brass connection and pet cock.

The whole of these pipes will be tested to twice the working pressure.

PLASTERER.

Plaster is similar in composition to mortar, but although it is not required to have such adhesive strength, its ingredients, nevertheless, must be scrupulously pure. Its chief characteristic constituent is a calcareous one, in the form of pure carbonate of lime or in combination with other elements.

Limes.—The pure lime, generally known as fat, rich, pure or chalk lime, should not contain more than 5 per cent. impurities, is produced by the calcination of calcium carbonate, and is generally used for inferior work. The purer the lime, the quicker it will slake, that slaking quickest and with great heat being considered the best for plastering. Care should be taken that the lime is properly burned, otherwise it will not slake properly, and will often "blow" in the work, causing damage to the surfaces. This can be avoided if the lime is run as soon as the work commences, or at least three or more weeks before it is used.

Hydraulic limes are so called from their properties of setting under water, not being dependent upon the absorption of CO_2 from the air. They are sometimes used for external stucco work, but have been practically supplanted by Portland cement. Their action in setting is unsuitable for internal work, and minute unslaked particles are more likely to remain than in pure lime, causing blowing and injury to the surface.

Portland cement is used chiefly for external plastering on account of its weatherproof qualities. For internal work it makes a plaster too hard for nails and plugs to be easily inserted, and is only used for skirtings and external angles. Portland cement plaster is quicker setting than lime plaster; it should not be mixed with lime plaster, as the balance of its constituents is thereby upset. Neat Portland cement should not be used for plastering; it should be mixed with sand in the proportion of two parts cement to five parts of sand for general work.

Keene's cement consists of plaster of Paris mixed with an alum solution, and is made by steeping the calcined stone (gypsum) in a strong solution of borax and cream of tartar, the two being baked together. It is quick setting and hard, suitable for external angles upon a backing of Portland cement. It is fairly fire-resisting, and used for setting tile hearths. It can be polished and takes paint well.

Martin's cement is made of gypsum and carbonate of potash calcined and ground to a fine powder. It is very similar to Keene's cement.

Parian cement is made from gypsum and borax calcined together and ground to a fine powder. It sets in about five hours, and, whilst not so hard as Keene's, its surface is translucent, non-porous and washable.

Roman cement is made from nodules in the London clay. It is quicker setting, but not so strong as Portland cement, and was formerly much used for external work.

Specially prepared colours are obtainable which will withstand the effect of alkalis in lime. Surfaces can be plastered to desired tints, but sufficient tinted plaster should be prepared for the work to be carried out, otherwise a different shade is likely to occur if two or more batches have to be made up for any particular room, &c.

Plaster of Paris is the name commonly given to gypsum, a hydrated sulphate of lime, after it has been ground up and gently calcined. It is very quick setting, but expands in the process, which makes it valuable for patching and filing up holes, &c. The principal use of plaster of Paris is in mixing with ordinary plaster to produce greater rapidity in setting, and is used in proportions varying from 1 in 5 to 1 in 20. Owing to its solubility in water it should not be used where it is exposed to the weather unless well painted.

Sirapite, now largely used, is a species of plaster of Paris made from gypsum impregnated with petroleum. It is easy to work, sets rapidly, and requires less material, two coats being sufficient for ordinary plaster work. It gives a hard surface.

Sand is used in plaster to increase its bulk, and being cheaper than lime is liable to be used in excess. With ordinary fat lime not more than two parts of sand to one part of lime should be used. Sand should be clean, sharp and hard. Sand not only increases the bulk of the plaster, it prevents excessive shrinking and helps in the crystallisation of the lime by allowing the air to percolate into the mass. For this reason sand with sharp edges is preferable to sand with a smooth surface.

Sand should be cleaned by washing, and should be free from loam. clay or salt. The former will probably upset the action of any special cement used, and salt will prevent the plaster from drying, resulting in efflorescence and discolouring wallpapers and decorations.

River sand can be used for external work with Portland cement and the light colour sand can be used with white cements for internal work. Pit sand is most generally used for internal work. For the finest work the sand should be screened through a sieve containing up to 500 meshes per square inch.

Simplifying London.

Deptford Borough Council is asking the L.C.C. to make the numbering of all roads continuous and to abolish all subsidiary names, such as "terraces" and "cottages."

East Kent Art Society.

The eighteenth annual exhibition of the East Kent Art Society opens to-day at the Sidney Cooper School of Art, Canterbury, and closes on August 20. Professor Abercrombie has promised to give the opening address.

THE WEEK IN PARLIAMENT

WESTMINSTER, *Wednesday.*

Houses for the Police.

Mr. Hurd asked the Minister of Health what progress was being made by county authorities in England in arranging to build houses for their own police, and thus lessen the housing shortage in the villages.

Mr. Chamberlain said that a number of county councils were carrying out schemes for the provision of police cottages, both in connection with subsidy schemes and otherwise.

Dwelling-houses Demolished.

Mr. Gillett asked for the number of dwelling houses pulled down in the boroughs of Finsbury Shoreditch and Holborn during the year 1925, and the number of new dwelling-houses erected.,

Mr. Chamberlain said the following was the answer :—

Borough.	Number of dwelling houses pulled down in 1925.		Number of new dwellings erected
Finsbury	Nil	..	Nil
Shoreditch ..	16	..	59
Holborn	13	..	25

Waterloo Bridge.

In the House of Commons, during the discussion of the Estimates for the Ministry of Transport, Sir G. Hume, who is a member of the L.C.C., said that Waterloo Bridge would not await the report of the Royal Commission on the Thames Bridges. It was gently sitting down, and the L.C.C. could not stand aside and see the upper districts of London submerged by reason of the river being blocked. There was tremendous need to proceed rapidly in the matter. He was told that the Commission would also have to consider the financial side of the problem of the London bridges. If the London authority was to be interfered with, and some outside national body was going to say what was to be done, then those who wanted the tune must be prepared to pay the piper.

Increase in Wages.

Sir A. Steel-Maitland, Minister of Labour, informed Sir F. Wise that the following were the percentage rates of increases in wages in the building trade over the rates at August, 1914 :—

(*Average of recognised time-rates in 40 large towns.*)

Bricklayers	81
Masons	86
Carpenters and joiners	84
Plumbers	86
Plasterers	85
Painters	101
Labourers	106

The Director of Housing.

Mr. Forrest asked the Minister of Health whether he proposed to appoint a new Director of Housing, in view of the resignation of the present director; and, if not, what arrangements were to be made for the discharge of the duties which this official had hitherto carried out.

Mr. Chamberlain said the the answer to the first part of the question was in the negative. Arrangements would be made whereby the duties hitherto carried out by the Director of Housing would be assigned to the permanent official in charge of the Housing Division.

The Subsidy.

Commander Bellairs asked the Minister what action he proposed to take in regard to houses affected by the termination of the subsidy in the case of houses which had not been completed because of shortage or delays in delivery; and whether there had been any tendency for prices to increase in view of builders being compelled to obtain their supplies in order to complete their houses before the termination of the subsidy.

Mr. Chamberlain said he was not yet in a position to add to the replies which were given to previous questions on the housing subsidy. He would, however, bear in mind the hon. member's point in the event of an Order being made modifying the present subsidy. He had no evidence that there had been a tendency for prices to increase for the reason referred to.

Houses Built.

Sir K. Wood stated that, since the Armistice, up to April 1, 614,024 houses had been built, 391,508 with State assistance and 225,516 without—a very remarkable record. Of these 233,674 were built by local authorities, and 380,350, the great majority of which were working-class houses, were built by private enterprise.

Housing in Scotland.

Sir J. Gilmour, Secretary for Scotland, informed Sir G. Collins that up to June 30, 1926, the figures for housing in Scotland were :—

1923 Act houses approved 17,168
Estimated capital value of annual Exchequer contribution £1,304,768

In addition to the above, 9,121 houses had been approved for the erection, with the aid of the grant, for the improvement of insanitary areas under section 1 (3) of the Housing, &c., Act, 1923. These houses replaced existing insanitary houses. The estimated capital value of the annual grant under this head was £1,441,270; but as the grant was on a fluctuating basis, it was impossible to give an accurate figure.

1924 Act houses approved 21,989*
Estimated capital value of annual Exchequer contribution £3,557,920

In addition, the Government were providing monies for the erection of 2,000 steel houses in different parts of Scotland by the Second Scottish National Housing Company (Housing Trust), Ltd.

Mr. Williams inquired why stoppages had occurred on the Chamberlain scheme but not on the Wheatley scheme.

Mr. T. Williams, a Labour member, asked whether, if any stoppage did take place, was it not due to the fact that the houses erected under the 1924 Act were for working-class people, while the others were for those who never did any work?

Sir K. Wood said that was a distinct misapprehension. That was the first time he had heard that distinction drawn, and, so far as he knew, there was no necessity for it.

Mr. Clynes asked whether it was not the case that, at the beginning of the general strike, the Trade Union Congress leaders expressly appealed to men working on housing schemes not to cease work.

Sir K. Wood: "That may well have been so, but apparently, no notice was taken of it."

The City Churches.

IN the House of Lords on Thursday, last week, the Bishop of London moved that the House should direct that the Union of Benefices and Disposal of Churches (Metropolitan) Measure should be presented to the King for the Royal Assent. He denied that the Bill was one to enable him to pull down the City churches; it was a Bill to prevent the Bishop of London being an iconoclast. He loved the City churches, and he would not have one of those monuments of beauty destroyed. This was really a Bill for putting together the parishes of the City, and so enabling the church to deal with surplus income and surplus man-power. It was not proposed to touch any of these churches until a decision had been given by the Fine Arts Commissioners, and then a grand jury of 35 people had to give their approval.

Lord Marshall, in moving that the measure be not presented for the Royal Assent, said that the City Corporation felt that all the powers required could be exercised under the Act of 1860, which allowed any church to be dealt with under the powers of Parliament.

The Earl of Crawford said that the measure was essentially one to destroy City churches. The Phillimore Committee scheduled 19 churches which were recommended for removal. There was All Hallows, Lombard-street, which was built by Wren, and 12 more churches built by Wren. There was St. Dunstan's-in-the-West, and also St. Mary Woolnoth, which showed how great a man Nicholas Hawksmoor, the architect, was. He really deserved the credit for the work attributed to Vanbrugh at Blenheim, at Oxford, at Castle Howard, and elsewhere. In addition to the three he had mentioned, the other churches scheduled were: All Hallows, London Wall, St. Botolph, Aldgate, St. Katherine Coleman, St. Clement, Eastcheap, St. Dunstan's-in-the-East, St. Magnus the Martyr, St. Mary-at-Hill, St. Michael, Cornhill, St. Alban, Wood-street, St. Anne and St. Agnes, St. Botolph, Aldersgate, St. Mary, Aldermanbury, St. Michael Royal, St. Nicholas Cole Abbey, St. Stephen's, Coleman-street, and St. Vedast, except the tower. But this list was only an indication of what was contemplated by the Committee, in whose report there was an almost ferocious eagerness for still further destruction. He could see nowhere in the report any real regret shown that it should be necessary to make this clean sweep of City churches. These churches were said to be without any great architectural merit or special antiquarian associations, and it was also said that some of the churches were only 50 yds. apart. But were there too many masterpieces in the National Gallery? Were we too rich in statues in the British Museum? The fact was that these historical monuments did get crowded into small areas, and it was the same in the historic towns of the world. Although these churches might not compare with Westminster Abbey or St. Paul's they were a precious heritage, because, as time went on, they were becoming such rarities. Under the Act of 1860 no fewer than 20 city churches had been destroyed. Was not that speed enough? Public opinion was changing on this question, and was assuming a very strong and decided attitude about the destruction of older buildings. Our losses had been so great and had been so little realised that we were only just beginning to estimate their real measure. Medieval London was swept away and devastated by the Great Fire; these churches were mementoes of our second Renaissance, the achievements and growth of the new city.

After a lengthy debate on Monday, the motion that the measure be presented for the Royal Assent was carried by 71 votes to 54.

On Tuesday the Sheriffs and the Remembrancer of the City of London attended at the Bar of the House of Commons and presented a petition against the measure.

The debate on the measure in the House of Commons is due to take place on Thursday, July 22.

Thames Bridges Commission.

Sir William Davison asked the Prime Minister if he could now inform the House as to the constitution of the Royal Commission on bridges over the Thames in the London area, and also as to the terms of reference to such Commission.

Mr. Baldwin said he was glad to say that the Commission was now complete, and the following gentlemen had been appointed members :—Lord Lee of Fareham (Chairman), Sir Willoughby Dickinson, Lord Hambleden, Professor Charles Inglis, Sir William Plender, Sir Lawrence Weaver. The terms of reference were as follows :—

"To survey the whole problem of cross-river traffic in London; to report what provision should be made to meet future requirements and, in particular, to consider the proposals made in connection with Waterloo and St. Paul's Bridges. Having regard to the urgency of the question, the Report should be completed at the earliest possible date."

* Of these approximately 1,900 houses were transferred from the Act of 1923.

Steel Houses.

Sir J. Gilmour, Secretary for Scotland, stated that on July 10 794 steel houses in Scotland had been commenced, and of these 38 had been completed. Sites for all the houses authorised had either been bought or feued. The amount expended as at July 16 inst. was approximately £158,000.

Housing Loans.

Mr. Churchill informed Lady Astor that since August, 1920, the Public Works Loan Board had advanced to local authorities from the Local Loans Fund for housing purposes £121,000,000. The total sales of savings certificates since the same date had been £273,000,000 and the repayments £179,000,000. The arrangement whereby local authorities were allowed, apart from any other right of access they might have to the fund, to borrow up to the limit of one half of the sales of savings certificates in their areas was utilised during the period named for housing purposes to the extent of £6,000,000.

Concrete Houses.

Sir K. Wood informed Mr. H. Williams that the returns of houses built with State assistance showed that during the 12 months ended March 31 approximately 10,000 houses constructed of concrete or by other special methods were completed.

Rising Prices.

Asked by Lady Astor whether officials of his department were inquiring as to the reasons for the increasing costs of working-class houses, Sir K. Wood said that a constant watch was kept by the Ministry upon the trend of house-building prices. An investigation of the reasons for the rise in building costs during the past 2½ years, which was approximately 11 per cent., showed that a rise of wages accounted for from 2½ per cent. to 5 per cent., according to district, and increases in the prices of materials accounted for about 4 per cent. The remainder of the rise in costs was probably partly due to the increase in the number of houses let in contracts, and in the Ministry's opinion the existence of the subsidy might have contributed something in this direction.

NEW SWIMMING BATH, BUENOS AYRES

THIS new swimming bath is situated in the basement of the "Jockey Club," in Florida-street, and completes the extension work designed by Mr. Horacio Randle, architect. The bath measures 26 ft. 3 in. wide by 55 ft. 9 in. long, these being the largest dimensions it was possible to adopt in the space available. The longitudinal section of the bath shows 6 ft. 2 in. depth at the head where the spring-board is; 7 ft. 6½ in. at 13 ft. 1½ in. distance, and rising to the minimum depth of 3 ft. 4 in. Water is pumped from a well and passes through four large heaters raising the temperature to 24 deg. C., which is maintained by means of a circulating pump. The emptying is carried out by a pump to the drain in Florida-street, which is 9 ft. 10 in. above the level of the bath. The warm water enters by six inlets, avoiding unsightly pipes. The floor of the bath is entirely smooth, and has three lines of blue tiles. The bath is surrounded by a gallery 8 ft. 2½ in. wide with a small bay for spectators. In the centre of the ceiling there is a sky-light which is removable by electric power.

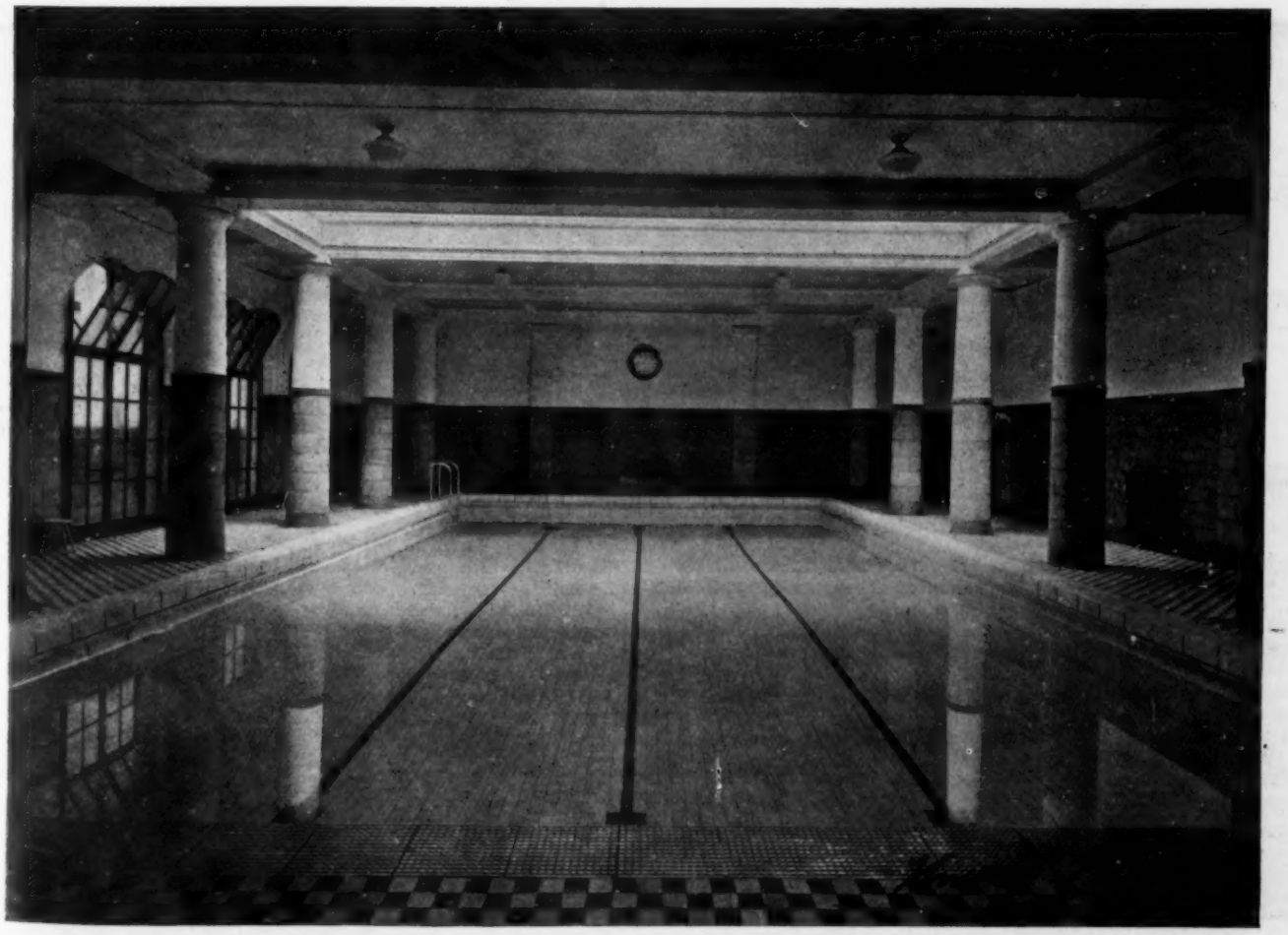
The bath is lined with white tiles 3 in. by 9 in., with special pieces for the angles and corners. In order to maintain the level of the water there is an overflow channel specially made in one piece and having small projections for spittoons. The floor of the gallery surrounding the bath and also of the bay is formed of 3 in. by 3 in. white and green tiles placed alternately. The wall and columns are lined on the height of 6 ft. 6¾ in. with ceramic made up of special pieces in green to match the floor. The whole of these materials were especially made in England to the architect's designs by The Leeds Fireclay Co., Ltd. The remainder of the walls and columns, also the ceiling, are entirely white, done in imitation stone finished with powdered marble. The heating is by a group of six radiators. The electric light is made up of 20 points, distributed in such a way and arranged at such a height that there is no shadow either on the columns or walls or on the floor.

Builder's Estate.

Alderman John Bowen, J.P., of Rochford, Strensham Hill, Moseley, Birmingham, and of Malvern, retired builder, lately chairman of City Arcades (Birmingham), Ltd., of Cornwall Buildings, Ltd., of Edwin Fletcher & Co., Ltd., of High-street, Ltd., and of Buildings, Ltd., and managing director of the Birmingham and Midland Counties Val de Travers Paving Co., Ltd., who died on April 16, aged 81, left estate of the gross value of £134,027, with net personalty £70,077.

Building Trade Wages Agreement.

The proposed new National Wages Agreement was discussed at a joint conference between representatives of the National Federation of Building Trade Employers and the National Federation of Building Trade Operatives, held in London on Thursday of last week. The proceedings, which were private, lasted for several hours. Among the proposals embodied in the draft agreement is a condition that existing standard rates shall be stabilised until August 1, 1927, unless varied by agreements for the payment of higher exceptional rates. It is also provided that all existing applications for regrading towns will be heard and adjudicated upon, further applications for regrading to be suspended until October, 1927. The question of securing payment for time lost through inclement weather is being considered on a joint contributory basis.



New Swimming Bath in the Jockey Club, Buenos Ayres.

MR. HORACIO RANDLE, Architect.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting?—ED.

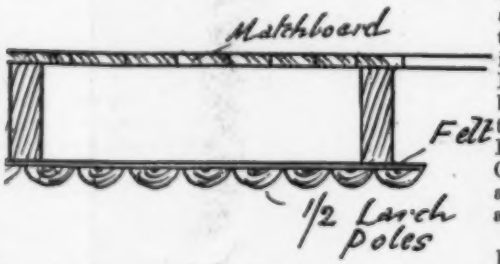
Client and Trade Discount.

[REPLY TO "SCOTIA," JULY 16.]

The fact that the words "nett" or "prime cost" do not appear in the contract or specification does not affect the question raised by "Scotia." The items he enumerates are undoubtedly portions of the work which are not included in the work he has undertaken to perform, but for which provisional sums are specified. The building owner is therefore entitled to employ "Scotia" or any other person to do the work comprised in the provisional items, and furnish the various items named, paying any sums he pleases therefor; though he could only allow against "Scotia" the provisional sums given for each class of work under the contract. In other words, the building owner is entitled to deduct the whole or part of the provisional sums, and it is in his discretion as to how those sums should be spent, or who should provide the materials or do the work coming within the provisional sums. "Scotia" is not entitled to purchase the goods or to take any trade discount. The whole matter is fully dealt with in the judgment of Channell, J. at page 205, Crittall *v.* London County Council (1911, 75 J.P.). There it is given that the term "prime cost" in a contract indicates that the item to which it relates will be carried out by somebody other than the contractor himself, and that entering an item as a "provisional item" clearly has the effect that the contractor bases his contract upon the sum named being the prime cost of the article. LAW.

Bees in Summer House.

SIR,—I should be obliged if any of your readers could inform me of a means of keeping bees away from a summer house erected in a wood. It is built of timber and lined inside with matchboard, and outside there is a tarred felt with half-round larch poles unbarked and coated with Solignum, and a roof of heather



thatch. The bees appear to eat through the felt and then make their hive between the studding. I have poisoned them out in previous years, but fresh swarms appear each season.

CLERK OF WORKS.

Fixing Storm Sashes.

SIR,—Suggestions are invited as to the method of fixing storm sashes to wood casement frames, built in reveal of 11½ in. wall. The buildings are in a very exposed position facing south-west, with the result that the sashes are not watertight. It is therefore proposed to fix storm sashes permanently, and that they should be made to open. The difficulty arises of opening the sash because of the existing casement sashes opening outwards. The frames in question have two mullions, the two outer sashes being made to open. M. H. REAY,

Lieut. R.E., Assistant Engineer, Lydd.

Maintenance.

[REPLY TO "QUERY," JULY 9].

SIR,—Under the "Defects and Maintenance Clause" usually found in a building contract, the contractor undertakes to make good defects discovered within the period fixed in the contract, and his obligation only extends to any defects in the work which appear during that fixed period, although the cause of those defects is not discovered until after the expiration of the fixed period referred to. See Cunliffe *v.* Hampton Wick Local Board (1893, 9 T.L.R. 378). It may be further stated that in general the architect's final certificate of completion to his satisfaction releases the contractor from liability for defects, unless fraud or collusion is shown. See Chapter VIII, Creswell on The Law Relating to Building Contracts. LAW.

The Lighting of Shop Windows.

[REPLY TO "FABRIC," JULY 9.]

SIR,—I am afraid that the combination of circumstances affecting the window in question are so unfortunate as to render a complete cure impossible. The problem is somewhat similar to that of the lighting of picture galleries so much before us of recent years. It has been shown that reflections in pictures are suppressed only when the lighting of the picture is stronger than that of surroundings, and also that reflections are most confusing in pictures with a dark background. Fabric can therefore only hope to ameliorate the conditions, and I should suggest that the background of the window should be painted a pure white, and that during the busiest parts of the day the window should be illuminated with strong electric light if available. It might also be worth while to approach the owners opposite, with a view to a more subdued colour scheme being adopted, at the applicant's expense. TOP-SIDE.

Cubic Measurement Tables.

SIR,—Can any reader tell me of a book of cubic measurement tables, suitable for calculations of cutting, excavations, and other earth works? B.

LAW REPORTS

CHANCERY DIVISION.

(Mr. Justice Russell.)

ANCIENT LIGHT LITIGATION.

A RESERVED judgment in the action, heard in June, by Horton's Estate, Ltd., of Colmore-row, Birmingham, against James Beattie, Ltd., drapers, of Victoria-street, Wolverhampton, was delivered recently by Mr. Justice Russell, in the Chancery Division. Plaintiffs sought an injunction to restrain a threatened obstruction to access of light enjoyed by ancient windows in their premises known as the "Joiners' Arms," Darlington-street, Wolverhampton, by a new building in course of erection by defendants at the rear of those premises. Mr. C. A. Bennett, K.C., appeared for the plaintiffs and Sir Herbert Cunliffe, K.C., for the defendants, who said that any legal wrong inflicted on plaintiffs could be adequately compensated by damages.

It was alleged by plaintiffs that the defendants' building was to be 44 ft. in height and that it was situated only 15 ft. from a window in their property, which would thus be deprived of an access of light sufficient for ordinary purposes. The building had already reached a height of 30 ft. when proceedings were started by plaintiffs and an undertaking in the action was then given by defendants. Whilst denying liability, defendants paid £100 into Court. Evidence in support of plaintiffs' case was given by Mr. Percy John Waldram, surveyor and valuer, and Mr. John Coulson Nicol, architect and surveyor.

For the defence evidence was given by Mr. Gerald De Courcy Fraser, architect, of Liverpool and Birmingham, Col. H. M. Kirkby, engineer, Mr. John Layton, auctioneer and valuer, Darlington-street, Wolverhampton, Mr. Edgar Quiggin, architect, of Liverpool, and Mr. Douglas Y. Pitts, surveyor and valuer, of Liverpool.

Giving judgment, his Lordship said the interference of light complained of was with respect to three windows in the "Joiners' Arms," but he disregarded all but the one on the ground floor, which gave access of light to a room 12 ft. square. There was no doubt that before defendants commenced their operations the room was exceptionally well lighted. The "Joiners' Arms" was no longer licensed premises and sooner or later plaintiffs intended to reconstruct them for use for other purposes. Defendants proposed to erect at a distance of not more than five yards from the "Joiners' Arms" a building 42½ ft. in height, extending right across plaintiffs' premises and this would deprive the room on the ground floor of all direct light from the south. They proposed to face the building with white glazed bricks, but the evidence was clear that the beneficial effect of these was both small and temporary. With respect to whether plaintiffs had established a course of action he would not analyse the evidence in detail, but he had no hesitation in accepting the view put forward by Mr. Waldram and Mr. Nicol that the room would be left inadequately lighted for ordinary purposes. "The human eye," added his Lordship, "requires as much light for reading in Darlington as in Mayfair." With regard to the questions of granting an injunction and mandatory order or allowing plaintiffs compensation, his Lordship referred to the difficulty of assessing the damages and said he might properly have to take into consideration the site value of plaintiffs' property. The case was one in which, in common justice, he ought to grant an injunction to the plaintiffs and an order on defendants to pull down their building. Defendants must have known that they were causing serious damage to the plaintiffs, whom they never consulted, and when complaint was made they intimated their intention of proceeding, which they did until stopped by the undertaking. That came perilously near to disregard of other people's rights. He ordered defendants to pull down so much of their building as exceeded the height of 23 ft. 6 in., and there would be injunction as claimed against the defendants. Defendants must pay the costs of the action, and there would be an order for the payment out to them of the £100 paid into Court.

His Lordship, on the application of Sir Herbert Cunliffe, granted a stay of the mandatory order if defendants gave notice of appeal.

CHANCERY DIVISION.

(Mr. Justice Eve.)

BUILDERS AND THEIR TRADE NAME.

Humphreys, Ltd., v. E. J. Humphreys & Co., Ltd.

IN this case the plaintiffs, Humphreys, Ltd., builders and contractors, of Knightsbridge, London, W., and New Malden, Surrey, applied by motion of an interlocutory injunction to restrain the defendants, Messrs. E. J. Humphreys & Co., Ltd., also builders and contractors, of Merton Park, Surrey, from carrying on business under that name or any name colourably representing the plaintiffs' name.

Mr. Cleveland Stevens, in support of the motion, said his clients were well-known builders and contractors, and the defendant company was formed by two brothers named Austin.

Mr. Justice Eve, in giving judgment, said he thought the plaintiffs had made out a case for restraining the defendants from continuing to trade in the names of E. J. Humphreys & Co., Ltd. He accordingly granted the injunction asked for by the plaintiffs with costs.

Obituary.

We regret to announce the death of Mr. John Gaff Gillespie, F.R.I.B.A., of the firm Gaff Gillespie & Kidd, Glasgow, which took place on May 7 last. After serving his apprenticeship with Mr. A. M. Munro, he joined the staff of James Salmon & Son, and became a partner in 1897. In 1906 he was elected a Fellow.

The death has occurred at Barnsley of Mr. Robert Dixon, L.R.I.B.A., in his 75th year, after a long illness. He was articled to the late Mr. Perkins, of Leeds, and started in practice in Barnsley 55 years ago. Among his works are included the Cooper Nurses' Home, the Cooper Art Gallery, the Barnsley Workhouse, New St. Mary's Schools, block of offices, Regent-street, Barnsley, St. Barnabas' Mission Church, besides the Burton-on-Trent Markets, Stacey Memorial Vicarage at Grenoside, and cemeteries at Ardsley and Crigglestone, all of which were won in competition. Latterly Mr. Dixon had been responsible for housing schemes at Darton, Kexbro, and Shepley.

"THE BUILDER" CONSTRUCTIONAL PROBLEM COMPETITION

THIS competition is limited to students in architecture and building classes or schools, assistants who have not passed the final of the R.I.B.A., and others engaged in architecture or building, not over 25 years of age. A prize of £1 will be awarded each week for a satisfactory solution. Drawings to be on paper, tracing paper or linen not exceeding 30 in. by 22 in. (Imperial size), and should be in ink, with bold lines and printing, as the drawings, if reproduced, are much reduced in size. The drawings can be sent in a large envelope or rolled. Competitors must put their name and address on each drawing. Those who wish to have their drawings, &c., returned must enclose a stamped and addressed adhesive label.

Answers, addressed to the Editor and marked "Problem 27," to be sent in not later than first post, August 2. The Editor's decision to be final.

AWARD FOR PROBLEM 24.

The prize of £1 has this week been awarded to Mr. Wm. Arthur, of Sanderstead, Surrey, whose drawing of a stone balcony to a golf club house is reproduced. The design is sound in construction and the details are architecturally correct, but more depth between the crown of the arch and balcony plinth would have improved the appearance.

Mr. M. Cormie submits a very pleasing design, but the jointing of the stonework is doubtful; a slight settlement and all the stones would crack. The drawing is partly reproduced.

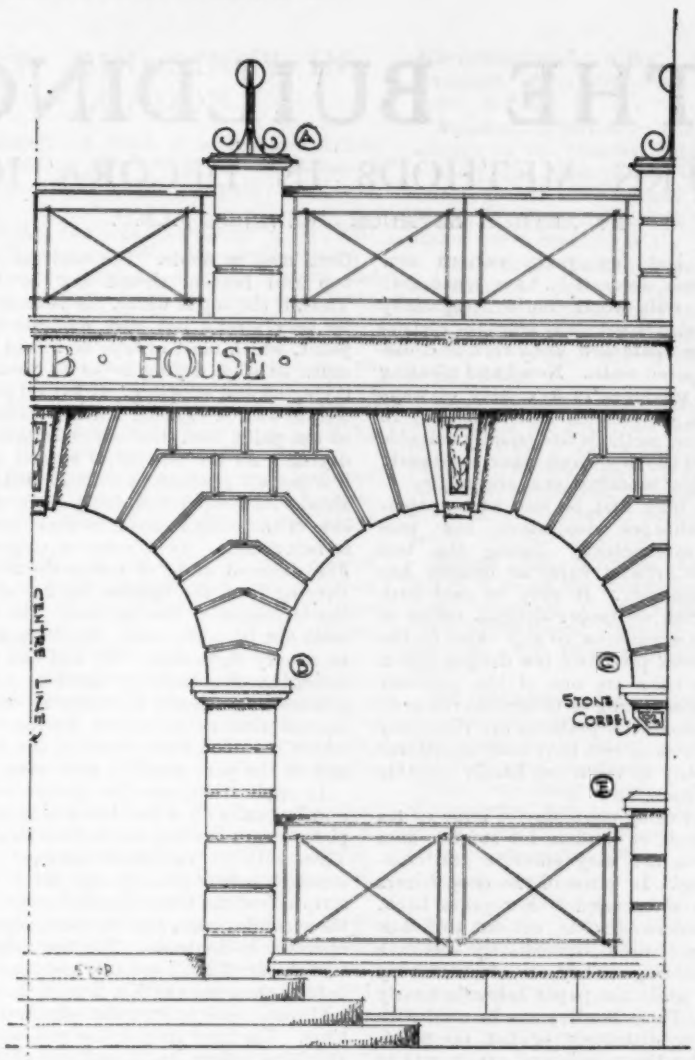
Mr. Phillips sends a similar design to that of the winner, but has placed pilasters at the end instead of the required corbels.

Others who submit fair solutions of the problem are: Messrs. A. J. Fowles, W. E. Faucott, S. D. Bowman, H. Mobberley, and W. Clark.

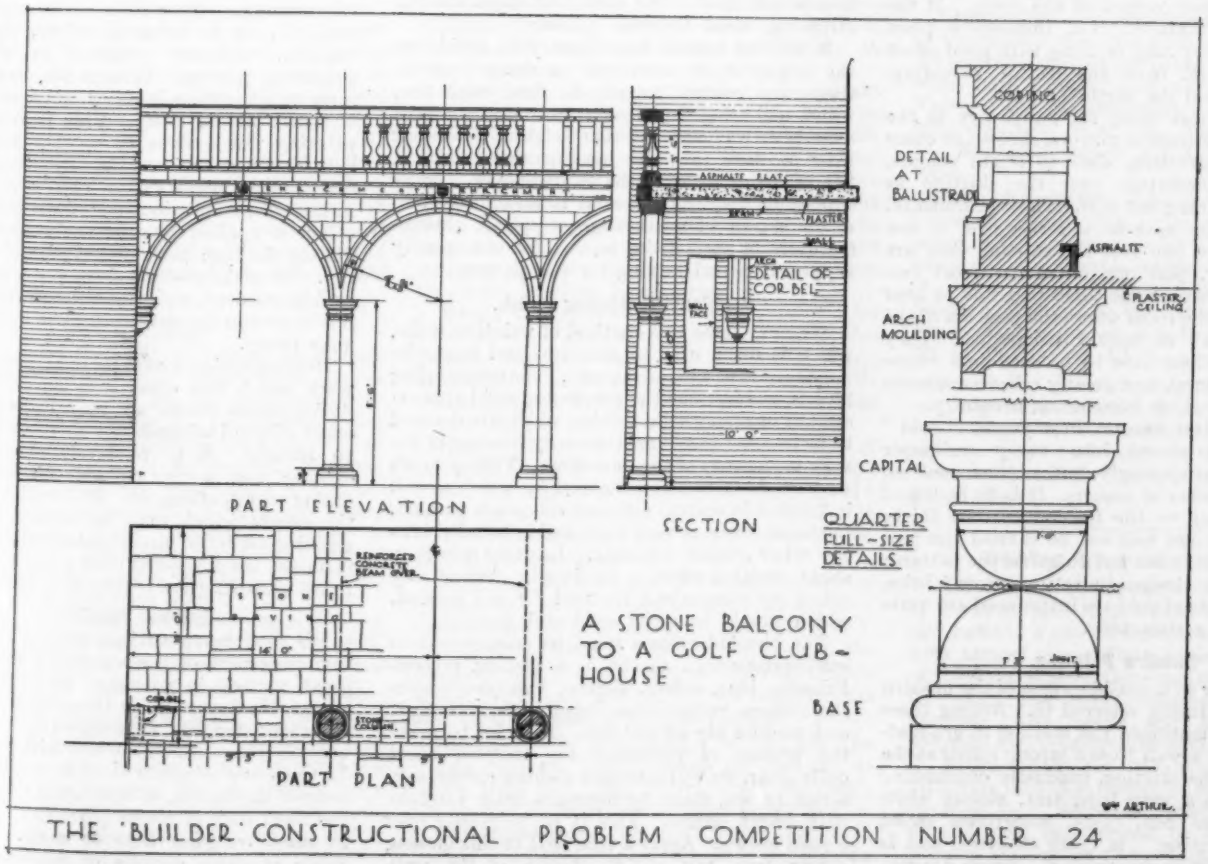
PROBLEM 27.

An octagonal space, 15 ft. across, enclosed with substantial walls and windows, is to terminate with an external stone cornice and roofed in with concrete carried upon steel joists, including a semi-circular concrete dome circular on plan. The roof is to be carried entirely upon the walls and to be without glazing. The roof to be laid with lead, but without solder.

Draw to scale 2 feet to an inch, a section and two half plans, showing the construction of the roof and also the lead work and details to a larger scale.



Problem 24. Detail of solution submitted by MR. M. CORMIE.



Winning Design, Problem 24: By MR. WM. ARTHUR.

THE BUILDING TRADE

MODERN METHODS IN DECORATION

By ARTHUR SEYMOUR JENNINGS, F.I.B.D.

During the last few years various new methods in house decoration have come into use which are well worth noting, especially by those who desire to get away from the eternal plain painted or enamelled woodwork and distempered or papered walls. Novel and pleasing effects may be produced in a variety of ways with oil paints, distempers, and enamels. In many cases, these methods are equally suitable for the walls and the doors and other woodwork, or when suitable modifications are made.

A few words may first be said as to paperhangings. Wallpaper decoration has progressed very satisfactorily during the last decade and the artistic value of designs has improved considerably. It may be said with truth that English wallpaper designs, taken in the aggregate, are superior to any other in the world. The French produce a few designs which appeal because they are out of the common or are so quaint or daring as to become interesting, but as a whole the patterns are distinctly poor. The Americans, too, have some handsome designs, but many of them are hardly suitable for English taste.

The fashion of using panelling for large rooms and narrow bands or borders for smaller ones continues. Both are very effective and comparatively cheap. In place of the deep friezes which were so often used a few years back, "cut out" borders—that is, cut out to follow the pattern—are used immediately beneath the picture moulding. They are often of very bright colours, while the paper below is nearly or quite plain. These borders can be used with good effect over distemper or flat oil paint. Corner pieces for the panels and ornaments to be used to break up the top and bottom borders of the panels are also provided and can be used with good results.

Instead of dividing up the walls into panels, narrow borders are sometimes used under the picture moulding and especially in small and moderate sized rooms above the skirting and vertically at each corner of the room. If the paper is a "texture," i.e., imitates a plain fabric, the border may be hung with good effect about 4 or 5 in. from the picture moulding, the skirtings and the vertical corners.

The very latest thing in wallpapers is the production of groups of flowers, shrubs, or other ornamental vegetation, done in bright colours, and used immediately over the skirting as though they sprang out of it. These ornamental groups may be used in a series over a low dado, but when put over the skirting they are used sparingly, just one or at the most two being stuck down on the plain paper at or near the corners of the room where the position of the furniture allows of their introduction. They permit of a colour note to be used just where it is most required, and greatly relieve a scheme of decoration which borders on insipidity.

During the last two or three years, "gold" has been introduced into many wallpaper designs—at first sparingly, but, as time went on, in a larger number of designs. It is to be hoped that this return to the fashion current thirty or more years ago will not be carried too far; if it is overdone, it can but vulgarise the patterns in general. The designs imitating woven fabrics, in which threads of gold are introduced are quite pleasing and satisfactory.

Shadow Painting.

We pass now to a consideration of the modern methods of painting referred to. Among these may first be mentioned the method of graduating the tint of a wall from a strong colour at the bottom over the skirting, gradually diminishing in strength to a very light tint, almost white at the picture rail. This, sometimes called "Shadow Painting," is quite effective, and is becoming increasingly popular. Before describing how this work is done, one or two observations may be made. The contrast between the top and bottom should not be very great. Thus, if the top is white, the bottom should not be very strong but only moderately so. The paint, which must always be mixed to dry flat, must be slow drying so as to permit of both laying off and stippling. If flat oil paint is used, a little wax or eggshell varnish should be added to the paint with the object of slowing up the drying. As the essence of success in this case is a perfect graduation without breaks the work should be viewed frequently from the opposite side of the room in order to make sure that this is being done. In a room of ordinary height, five different tints of colour should be mixed, varying from the lightest for use at the top to the strongest at the bottom. The top colours need not be quite white, but in most cases will be a very light tint. We will call the various strengths of colours by numbers 1 to 5. The greatest care should be taken to determine the correct tint or colour of the paint (No. 3), which is to be in the centre of the wall, as that will be the part which is most seen.

In application, take the lightest colour (No. 1) and lay off with a flat brush a strip under the picture rail, leaving the bottom edge irregular. Then mix in one-third part of the second strength colour (No. 2) and paint in a second strip below the first. Immediately stipple over the irregular edge, and for this purpose a second operator is desirable. For the next strip, add two-thirds of No. 1 colour; paint and stipple as before, then use the No. 2 as it is, without any addition. Give an irregular edge and stipple each time. The next strip below will consist of two-thirds of colour No. 2 and one of No. 3. The next strip, one-third No. 2 and two-thirds of No. 3; then No. 3 by itself, and so on to the bottom of the wall, taking in turn Nos. 4 and 5 and adding one-third and two-thirds respectively exactly in the same way. This method if properly carried out will give as perfect a gradation of colour as can be expected, and no breaks will show. The work, and especially the stippling, must be done quickly.

It will, of course, be necessary to divide up the height of the work into as many parts as there are colours mixed—in this case, five, which will bring No. 3 colour in its full strength exactly in the centre of that height. This work may be done in white lead or zinc oxide, in flat oil paint or in washable distemper, always supposing that the material is slow drying, so as to permit of a thorough stippling. Manufacturers of specialities on request can usually supply a special mixing for the purpose.

"Tiffany" Glazing Finish.

We next come to a method of painting walls, which is much used in America, and might be employed here with advantage. The outstanding idea is to overcome the severe and rigid appearance of ordinary solid finishes which are deemed to be in some cases unsatisfactory because of the very uniformity of the monotone. Tiffany finish may be described as a method by which a wall is finished in several different colours in patches, but each colour is very light and is blended into the other colours adjacent. In other words, a slight mottled effect is produced. Almost any colour or colours can be used for the ground, which should be quite solid and uniform.

The blended colours must be transparent or semi-transparent, as this is a glazing process. Prussian blue, cobalt, sienna, Vandyke brown, the umbers, yellow lake, Dutch pink, rose pink, and madder are all suitable. In order to make the process of producing the mottled effect quite clear, we will take first a single colour, say, a rich brown, made by mixing a little Vandyke with burnt sienna. This is to be glazed over a solid brown. Apply a thin coat of this glazing colour over, say, a 5 ft. stretch of the wall. Immediately, and before the glazing coat has time to dry, apply here and there spots of the same colour mixed much stronger. Do not merely dab these spots on, but give the brush a twist so that the space may be painted and an excess of colour avoided. Now stipple over the spots, especially at the edges, and then use a large pad of cheese-cloth further to soften off the edges. Dab and manipulate this until the spot becomes merged into the ground and gives the cloudy effect which is being aimed at. When finished, we shall have a rich brown wall slightly darker in some places than in others, the dark being skilfully blended into the light.

It will be obvious that instead of one colour, two, three or more can be used if desired. In this case, separate pots of colour should be mixed, taking care that the colours are not too strong. They should be painted on the wet glazing colour in spots not too close together and then be stippled and dabbed with the cheese-cloth pad, as already described, until the whole is nicely blended together. Light blues, greens, reds, &c., may be thus blended and a skilful craftsman can produce some remarkably good effects by varying his colours sufficiently. In passing it may be observed that the method of stippling and dabbing above mentioned can be used successfully for producing a clouded effect on ceilings, light azure blue being used for the ground, and white and blue for the clouds. In this class of work stars in silver or gold of varying sizes are sometimes introduced to represent the firmament.

Glazing and Scumbling Processes.

Although scumbling is the exact reverse, so to speak, of glazing, the two processes are often used in conjunction with excellent results. Glazing, of course, is merely painting over a solid but usually dull colour with a brighter but transparent paint. In this way many beautiful finishes can be produced which could not be obtained in any other way. Thus a crimson lake or madder glaze over Indian or Venetian red, or emerald green (the non-poisonous variety should always be used) over a solid ultramarine ground give very pleasing results. Scumbling may be defined as that process in which a coat of paint while wet is manipulated in such a manner as to expose some of the coat of paint, which is of a different colour, immediately beneath. Ordinary graining is therefore a scumbling process. Perhaps the most common form of scumbling is the method of producing an effect of old ivory. This is done by first painting the work with eggshell enamel of a light cream colour and then applying a coat of raw sienna, burnt sienna and vandyke brown mixed with turpentine and a little varnish. The colour is applied all over the work and immediately the high parts are wiped off with a soft rag. To make a satisfactory job a good deal of skill is required, and care must always be taken not to overdo the darkened parts but to wipe off very freely.

Brush graining is another example of scumbled work which has come into much prominence during recent years. In most cases it gives the effect of wood without any attempt being made to imitate. It is relatively cheap, easy to execute, and is very suitable for board rooms, dining rooms, offices, &c. It should be noted that the effects which may be obtained by brush graining are by no means restricted to wood. For instance, black applied over a white ground and brush grained gives a very nice silver grey.

Rubber Stipplers.

We next reach various mechanical means of removing part of the scumbling coat and here great variety is possible. Probably the most acceptable departure in this direction is the use of rubber stipplers, introduced by a well-known varnish house, which has met with great success. In these new stipplers strands of rubber are used instead of bristles, so that when dabbed against the fresh coat of colour parts of it are removed in small irregular dots or spots. The tool is made in three degrees of fineness and hence produces different sized spots. The three may

be used in conjunction; for example, the fine variety on the panels of a door and a coarser one on the stiles and rails. This ingenious but very simple method may be used on walls or large surfaces. The dado of one of the large dining halls of the Connaught Rooms is done in this manner and looks well. The great thing is to get some uniformity in colour and to avoid a patchy appearance. To effect this it is necessary frequently to view the work from the opposite side of the room. It will be understood that in this as well as in the processes about to be described, any and every possibility of variation between the two colours viz., that of the ground and the scumble colour, is possible. One may be black and the other white; one bright scarlet red and the other pink, and so on. The colour list is limitless, being only restrained by good taste and suitability.

Other Methods.

Another kind of scumbling is done by the aid of crumpled up newspaper or crepe paper formed in the shape of a roll and passed over the wet scumbling coat. The crumbled surface will remove the paint in very irregular, feathery forms, and gives a novel appearance. The work may be slightly blended with a badger if desired, but it is usually best untouched. Still another way is to use a coarse sponge on the wet scumbling coat, which will, of course, remove the paint in irregular parts. The sponge should be cut flat on one side and be washed out from time to time in turps. A set of cut sponges ranging from fairly fine to very coarse can be kept for this work, and those interested should experiment with various colours and note carefully the different effects produced. For example, put a very dark green over a light one, sponge, and observe the effect. Now reverse the colours, using the very dark green as the ground; sponge as before and it will probably cause a little surprise to witness the difference.

A good plan is to mottle the surface of a wall or door panel and to leave the stiles, &c., plain. The National Lead Co. suggest the following colours for the different rooms named, and these are given here by way of examples: Lobby of a theatre—ground colour of medium brown with golden yellow finish. Lobby of a hotel—ground of red buff with light red buff finish. Lobby of a club—ground of warm grey with finish of light yellow. Lobby of the apartment or bank—ground of buff with cream finish. Reception room of the office—ground of tan with blue green finish. In panels, the sponge-mottled finish is suitable for use in the following rooms, with the colours suggested: Living room of the home—ground of yellow buff with light golden yellow finish. Bedroom of the home—ground of shell-pink with light grey finish. Restaurant of the hotel—ground of soft greyed green with light cream yellow finish. Smoking room of the theatre—ground of cold grey with rose finish. Smoking room of the club—ground of dark blue with grey finish. Waiting room of the railroad station—ground of corn yellow with tan finish.

Combing.

Mr. James Lawrence, in a paper read some time since, showed how some novel effects could be produced by the use of an ordinary grainer's comb in removing portions of a top colour while wet and varying the colour of the two coats according to circumstances. Here are some of the variations given, some of the examples being dark colours on light and others light on dark:—wavy combing; a series of semi-circles or quadrants reversed; crossed combing at right angles straight and wavy; combing in herring-bone fashion; and so on.

Not only were different colours used for the two coats, some of them quite brilliant, but gold, silver and various coloured bronzes were employed and then combed.

Bronze in Varnish.

At the Paris Exhibition of Decorative Art were shown some finishes done with bronze mixed with light coloured varnish. Only a very limited amount of the gold bronze was used. This finish is a little difficult to apply, and a useful hint is to remember to brush only one way. Also stir the varnish frequently.

NEW BUILDINGS IN LONDON.

Camberwell.—A block of self-contained flats is to be erected upon a site just off Champion Park, S.E. Mr. R. W. Knightley Goddard, architect.

Chingford.—The Cork Manufacturing Co., Ltd., 56, New Bond-street, W.1, has decided upon a scheme for the duplication of its factory and plant, the work to be carried out during the next few months. Mr. A. Coote, M.A., chairman.

Clapton.—Plans have been prepared for an enlargement of the East London Blind Children's Home and School at Warwick-road, Upper Clapton, E.5. Mr. Geoffrey E. Read, A.R.I.B.A., architect, 19, Basinghall-street, City, E.C.2.

Ealing Broadway.—Plans have been prepared for the erection of a new mission hall in connection with St. John's Church, W., to cost about £2,000.

Ealing, South.—A new school is to be erected on a site at South Ealing, at a cost of about £15,000. Mr. W. J. Dickens, builders, 19, The Broadway, Ealing, W.5. Mr. W. R. Hicks, architect, Town Hall, Ealing, W.5.

Finsbury.—Plans are now in course of preparation for the erection of a large public hall on a part of a vacant site in Tyndale-place, N.1. Mr. E. C. P. Monson, F.R.I.B.A., architect, Finsbury-pavement House, 120, Moorgate, E.C.2.

Fulham Palace-road.—The Fulham Hospital in St. Dunstan's-road, Fulham Palace-road, W.6, is to be extended, and existing buildings altered. Messrs. A. Saxon Snell & Phillips, architects, 9. Bentinck-street, Manchester-square, W.1.

Golders Green.—In connection with a large estate development programme plans have been approved for 93 houses and 72 garages in Cheyne-walk, Beaufort-gardens, Denehurst-gardens, and Reuter's-avenue. Messrs. Haymills, Ltd., builders.

Harlesden.—New premises are to be erected on the site of Nos. 60–62, Harlesden High-street, N.W., for banking purposes for Messrs. The Midland Bank, Ltd., Messrs. Whinney, Son & Austen Hall, architects, 8, Old Jewry, E.C.2.

Hillingdon.—The Nurses' Home at the Union Institution at Hillingdon is to be reconstructed and extended at a cost of about £15,000. Messrs. Building and Public Works Construction Co., builders, Swinton. Messrs. A. Saxon Snell & Phillips, F. and A.R.I.B.A., architects, 9, Bentinck-street, Manchester-square, W.1.

Keith-road.—A group of 36 flats, in four blocks of eight and two blocks of two each, is to be built on a site in Keith-road, Brettenham-road, and Countess-road. Messrs. Warner Estates, Ltd., builders, 30, Norfolk-street, Strand, W.C.

Kenton-road.—A development scheme for the Farm Estate in Kenton-road, N.W., is about to be put in hand, the lay-out plans showing about 220 new houses. Messrs. The Central Estates Co., Ltd., builders, Kenton-road, N.W.

King's Cross.—Plans have been approved for new premises in Arlington-street, N.W.1, for Messrs. The Gas Light and Coke Co., Ltd., Horseferry-road, Westminster, S.W.1. Mr. H. Austen Hall, F.R.I.B.A., architect, 8, Old Jewry, E.C.2.

King's Cross.—A site at the junction of Grimaldi-street and Southampton-street, King's Cross, N.1, has been selected for the erection of a block of self-contained flats. Mr. E. C. P. Monson, F.R.I.B.A., Finsbury-pavement House, 120, Moorgate, E.C.2.

Kingsway.—At a meeting of Grand Conclave of the Order of the Secret Monitor, whose headquarters are at Duke-street, St. James's, S.W.1, it was stated that a freehold site near to the proposed new Masonic Temple in Great Queen-street, W.C., had been secured for headquarters and would be used as soon as possible.

Lewisham.—It is proposed to rebuild the "Two Brewers" public-house on the site at Perry Hill, S.E. Mr. Rowell Parr, architect, 42, Cranley-gardens, South Kensington, S.W.

Marylebone-road.—Plans are before the L.C.C. for the reconstruction of the building housing Madame Tussaud's waxworks exhibition in Marylebone-road, N.W.1. Secretary, Madame Tussauds (1926), Ltd., Alsop-place, Marylebone-road, N.W.1.

Neasden.—A further extension of their housing scheme on the Neasden Estate is to be carried out by the Metropolitan Railway Company. Concrete and brick houses are to be erected. Mr. C. W. Clarke, architect, Company's Offices, Baker-street Station, W.1.

North End.—Building operations are to be commenced upon a large block of business premises on a site on the Willow Lodge estate in Ballards-lane and Long-lane, N.W. Messrs. D. Morris & Sons, Ltd., architects, 57, Charing Cross, S.W.1.

North London.—The Mercers' Company is negotiating for suburban land for lay-out and equipment as a sports ground for the Mercers' School at Holborn Bars, W.C. A pavilion will probably be erected. Messrs. Daniel Watney & Sons, surveyors to Company, Frederick's-place, Old Jewry, E.C.2.

Notting Hill.—Princess Louise Duchess of Argyll is to lay the foundation stone of the proposed extension of the Latimer-road Mission, Blechynden-street, Notting Hill, W.10. on July 28. Mr. Charles Smallman, Superintendent.

Old Ford-road.—Large new buildings, with boiler-house, chimney, &c., are to be erected, principally in reinforced concrete, on a site in Old Ford-road, Cambridge-road, E.2. Mr. H. J. Deane, consulting engineer, 36, Victoria-street, Westminster, S.W.1. Messrs. George Corderoy & Co., quantity surveyors, 21, Queen Anne's Gate, Westminster, S.W.1.

Orange-street.—New buildings, including a library, are to be erected on a site in Orange-street, S.W. Mr. Andrew N. Prentice, F.R.I.B.A., architect, Hastings House, Norfolk-street, Strand, W.C.

Orpington.—A new block of public offices is to be erected upon a site near the railway station. Messrs. J. W. Ellingham, Ltd., builders, Dartford, Kent. Mr. F. Danby Smith, F.R.I.B.A., architect, Parliament Mansions, Victoria-street, Westminster, S.W.1. Cost about £12,500.

Raynes Park.—A site of about 11 acres is being negotiated for for a new secondary school for the Surrey Education Committee. Messrs. Jarvis & Richards, architects, 60, Tufton-street, Westminster, S.W.1.

Regent-street.—Negotiations are in progress in connection with the placing of the contract for the rebuilding of the Oddenino's Restaurant, with flats, shops, and showrooms. Messrs. Yates, Cook & Darbyshire, 43, Great Marlborough-street, W.1, and Mr. T. H. Smith, 17, Basinghall-street, E.C.2, associated architects.

South Kensington.—The directors of Messrs. Spiers & Ponds, Ltd., caterers, New Bridge-street, E.C.4, propose during the current year to carry out considerable improvements to several of their hotels, including Bailey's Hotel at South Kensington, S.W. Plans by company's surveyors department, New Bridge-street, E.C.4. Mr. G. P. Pearson, A.C.A., secretary.

Streatham.—An estate bounded by New Park-road and Kirkstall-road, Streatham, S.W., is to be developed for residential purposes, and plans show a new road with 56 houses adjacent. Messrs. Tysoe & Harris, builders, Thornton Heath, Surrey.

Building Opportunity in Toronto.

H.M. Trade Commissioner at Toronto (Mr. G. F. Braddock) reports that the erection of a new hotel in a city in Ontario is to be proceeded with almost immediately at an estimated cost of 1,500,000 dollars, three quarters of the capital for which has been subscribed by American interests. The names and addresses of the architect and the secretary of the hotel company, to whom offers for the supply of building materials, fitments, furniture, and other supplies common to a first-class hotel should be forwarded, may be obtained by United Kingdom firms on application to the Department of Overseas Trade, 35, Old Queen Street, S.W. 1.

HOUSING AND PRIVATE ENTERPRISE

IN our last issue we summarised the statement made by the Minister of Health, in Committee of Supply, as regards housing, on the vote for the expense of the Ministry, but Sir Kingsley Wood, in his reply on the debate, gave some further figures which are of interest. He stated that since the Armistice, up to April 1 last, 644,024 houses had been erected, of which 391,508 were built with State assistance, and 222,516 without any State aid. But his tribute to private enterprise is what we wish to emphasise, for of these 644,024 houses, 233,516 were erected by local authorities, but 380,350 by private enterprise, the great majority of which were working-class dwellings.

It is the fashion in certain quarters to decry private enterprise, and when an industry is in difficulties from any reason whatever, the detractors of private enterprise seize upon the fact that it is under private control, and attribute its misfortunes entirely to that cause. But even further than this, a disregard of economic necessities is shown in order to drive industries into difficulties, and to make a case against private enterprise so as to foster the cause of nationalisation. Such a policy would destroy nationalised industries quite as much as private industry, but possibly if nationalisation were ever to come, the State, being owner and master, would take a firm stand and insist on wages, output, &c., being placed upon an economic footing.

The above figures as regards housing show that if an industry is in a position to function at all, and conditions are the same both as regards municipal and private enterprise, it is the latter that takes the lead and supplies the nation's need the most effectively. The fact that the industry is subsidised does not affect this argument, as an endeavour has been made to hold the scales evenly, but it would be interesting to know the proportion of subsidy paid to the municipalities and to private enterprise in respect of the 233,516 houses erected by the former and the 380,350 houses erected by the latter agency.

Mr. Orr, in an article which we published on the 9th inst., gives the houses erected by local authorities in England and Wales since the war, all subsidised, as 233,664. We do not know the exact number of houses erected in England and Wales by private enterprise with subsidy, but Mr. Orr gives a table for Greater London from which it appears, so far as we can gather, that in that area the subsidised houses erected by private enterprise in the period April 1, 1924, to March 31, 1926, number somewhere about 18,000 as compared with between 80,000 and 90,000 houses of a rateable value up to £35 unsubsidised, and these figures gain some support from those given above by Sir Kingsley Wood when he stated that 391,508 were built with State assistance and 222,516 without State aid, for the unsubsidised houses would be those erected by private enterprise and the difference between these two figures is 78,992.

These statistics give some idea of the part played by private enterprise in the housing difficulty, both as regards the number of houses erected and the saving of cost to the State, and should be noted by those who belittle the individualist system prevailing in this country. Should private enterprise perish there can be little doubt that its death would infect this nation (with its traditions of private enterprise) with a disease so severe that its recovery would be more than doubtful.

"Madame Tussaud's" to be rebuilt.

Madame Tussaud's, which was burnt out in March last year, is to be rebuilt, and a new company, Madame Tussaud's (1926), Ltd., has been registered for the purpose, with a capital of £157,000. Plans for the new building on the old site are now before the London County Council, and as soon as they have been approved, building will start. It is hoped that by this time next year the exhibition will be open again to the public.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'rp'ters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Lab'rers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bedford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Birkenhead	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Colchester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam. (Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/6	1/2½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/7½	1/3½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Great Yarmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/0½
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lancaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Liverpool	1/10	1/10	1/10	1/11	1/10	1/10	1/9½	1/4½
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London { 12 m. radius	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/8½	1/4½
London { 12–15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/8	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/3½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/2
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/1½
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/3½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/1½
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5	1/3½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/1½
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1½
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/2½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/1½
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/3½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/2½
Walsall	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/3½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/1½
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/2
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/3½
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	

(For rates of wages in the Building Trade in Scotland, see page 152.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

JULY 26.—**Adwick-le-Street.**—BUILDING.—For (1) Excavating trenches for water mains at Skellow; (2) building of filter house, meter house, and forming lime pits at Adwick; and (3) street works, sewers and surface water drains at Skellow, for the U.D.C. F. Allen, clerk, Adwick-le-Street, Doncaster. Deposit £2 each.

*JULY 26.—**Bridgwater.**—HOUSES.—Erection of 54 parlour and 44 non-parlour houses in blocks of two, four and six, for the B.C. Samson & Colthurst, architects, 51, High-street, Bridgwater. Deposit £2 2s.

JULY 26.—**Bristol.**—LIGHTING.—Electric lighting of Sheds "E" and "F," The Grove, for the Port Authority. T. A. Peace, Engineer, Port of Bristol Authority, Chief Engineer's Office, Avonmouth Docks.

JULY 26.—**Bristol.**—PAINTING.—Painting, repairs, &c., at: (1) five cottages, Southmead-road, and (2) service boys' home, 20, Pritchard street, St. Paul's, for the B.G. T. S. Lamb, clerk, St. Peter's Hospital.

JULY 26.—**Carlisle.**—LIGHTING.—Lighting installation at the new electricity works, Willow Holme, for the T.C. C. W. Salt, City Electrical Engineer.

JULY 26.—**Castleford.**—CONVERSION.—Connection with six privy conversions, and provision of six additional water closets at 1 to 23, Driver's-row, for the U.D.C. T. E. Birtwisle, Sanitary Inspector.

JULY 26.—**Carnforth.**—FIRE STATION.—Fire station stables, &c., for the U.D.C. F. Holt, Surveyor's Office,

JULY 26.—**Chertsey.**—COTTAGES.—Twenty-eight cottages in Byfleet, for the R.D.C. N. S. Brettell, Clerk, 80, Guildford street. Deposit £2 2s.

JULY 26.—**Chiswick.**—CONVERSION AND BUILDING.—(a) Conversion of existing school buildings at Glebe-street, Chiswick, into blocks of fourteen flats, and (b) the erection of eight new blocks of four flats each at Strand-on-the-Green, Chiswick, for the U.D.C. Edward Wallis, F.S.I., M.Inst.C.E., architect, Town Hall, Chiswick, W. 4. Deposit £2 2s. in respect of each scheme.

JULY 26.—**East Preston.**—PAINTING.—External painting and repairs to the premises of the Poor Law Institution at East Preston, near Littlehampton, for the B.G. J. W. Calvert, Clerk, East-street, Littlehampton.

JULY 26.—**Edinburgh.**—BUILDING.—Alterations on blood-house at the slaughter-houses, Gorgie, for the T.C. E. J. MacRae, A.R.I.B.A., City Architect.

JULY 26.—**Exmouth.**—HOUSES.—Twenty-four houses for the U.D.C. S. Hutton, engineer and surveyor, architect. Deposit £2 2s.

JULY 26.—**Farnworth.**—HOUSES.—Eighty-eight houses at Harper Green, for the U.D.C. F. Ashton, surveyor. Deposit £2.

JULY 26.—**Forehoe.**—COTTAGES.—Six pairs of cottages at Norwich-road, Wymondham, for the R.D.C. L. Standley, Clerk, Union Offices, Wymondham. Deposit £1.

JULY 26.—**Glasgow.**—HEATING.—Heating installation required for Kelvin Hall, for the T.C. J. Lindsay, Town Clerk. Deposit £10 10s.

JULY 26.—**Lancaster.**—HOUSES.—Eighty-four houses on the Bulk estate, for the T.C. F. Hill, Borough Surveyor. Deposit £1 1s.

JULY 26.—**Leyland.**—LIGHTING.—Wiring and general installation of electric light in the Public Hall buildings, Towngate, for the U.D.C. M. H. Wilkinson, surveyor.

JULY 26.—**London.**—FENCING.—Supply and erection of wrought-iron unclimbable fencing at the Kensington Memorial Recreation Ground, St. Quintin's Park, Kensington, for the L.C.C. Chief Officer, Parks Department, The County Hall, S.W.1 (Room 393F).

JULY 26.—**Lymington.**—REPAIRS.—Laying of a new floor and repairs to roof at the Drill Hall, for the Territorial Army Association of Hampshire and the Isle of Wight. W. Hinton Stewart, architect, Barton-on-Sea, New Milton. Deposit £1.

JULY 26.—**Pontefract.**—CENTRE.—Maternity and Child Welfare Centre, for the T.C. W. H. Newton, Borough Engineer and Surveyor. Deposit £2 2s.

JULY 26.—**Portsmouth.**—HOMES.—New Children's Homes, Peaked Field, Cosham, Portsmouth, for the Guardians of the Parish. G. E. Smith, L.R.I.B.A., architect, Victoria-road North, Southsea. Deposit £3 3s.

JULY 26.—**Rathmines and Rathgar.**—PAINTING.—Of the outside of the Town Hall, Rathmines, for the U.D.C. Surveyor.

*JULY 26.—**Rowley Regis.**—HOUSES.—Erection of 62 non-parlour type houses and for incidental works at Silverthorne-lane, Cradley Heath, for the U.D.C. The Clerk, Council House, Old Hill, Rowley Regis.

JULY 26.—**Salford.**—LIGHTING.—Extension of the electric lighting installation at the Poor Law Offices, Eccles New-road, for the B.G. E. H. Inchley, Clerk.

JULY 26.—**Smethwick.**—LIGHTING.—Electric wiring of 194 houses on the Slatch House estate, Warley, for the C.B. R. Fletcher, Borough Engineer and Surveyor.

JULY 26.—**Stockport.**—CONVENIENCES.—Shelter and public conveniences, Mersey-square, for the C.B. H. Hamer, Borough Surveyor.

JULY 26.—**Twickenham.**—HOUSES.—Erection of 52 and four blocks of flats comprising 16 tenements, on the Colne Lodge site, Staines-road, Twickenham, for the U.D.C. Surveyor to the Council, Town Hall, Twickenham. Deposit £2 2s.

JULY 26.—**Worsborough.**—HOUSES.—For (1) construction of streets, (2) construction of drains and sewers, (3) construction of 40 houses, each with paths and fences, on the Bank-end site, for the U.D.C. Mr. T. Shield, surveyor. Deposit £1 1s.

JULY 27.—**Cockermouth.**—HOUSES.—Twenty-six dwelling-houses of parlour and non-parlour type on Fitz-road site, together with drainage and fencing works, and the construction of roads and sewers, for the U.D.C. Hy. Graham, engineer and surveyor. Deposit £2 2s.

JULY 27.—**Doncaster.**—HOUSES.—Eighty-one houses at Hexthorpe, for the T.C. F. Oscar Kirby, Borough Engineer, 2, Priory-place. Deposit £2 2s.

JULY 27.—**Edinburgh.**—EXTENSION.—Of Portobello power station, for the T.C. E. J. MacRae, A.R.I.B.A., City Architect, City Chambers.

JULY 27.—**Great Yarmouth.**—DECORATIONS.—Internal decoration of the entrance hall and staircase, &c., of the Town Hall, for the C.B. S. P. Thompson, Borough Engineer.

JULY 27.—**Guildford.**—COTTAGES.—Erection of 39 non-parlour type cottages in the parishes of Puttenham (three), Pirbright (12), West Horsley (six), Shere (six), Clandon (12), for the R.D.C. J. W. Wilton, M.Inst.M. & Cy.E., Surveyor, Market Chambers, Onslow-street, Guildford. Deposit £2 2s.

JULY 27.—**Hitchin.**—COTTAGES.—Group No. 3, erection of 64, for the U.D.C. Surveyor, Town Hall, Hitchin. Deposit £2 2s.

JULY 27.—**Linslade.**—HOUSES.—Twelve houses in Mentmore-road, for the U.D.C. H. A. Rolls, architect, 31, High-street, Leighton Buzzard. Deposit £2 2s.

JULY 27.—**March.**—OFFICES.—Block of offices in extension of the County Hall, for the Isle of Ely C.C. R. S. W. Perkins, County Surveyor, Lynn-road, Wisbech. Deposit £3 3s.

JULY 27.—**Pontypridd.**—BATH.—Reinforced concrete for the construction of an open-air swimming bath at Ynysangharad Park, for the U.D.C. W. E. Lowe, engineer and surveyor. Deposit £2 2s.

JULY 27.—**Prestwich.**—PAINTING.—External painting of houses on the Council's estate: (1) 30 situate in Bentlane and 54 in The Meadows; (2) 30 situate in Scholes lane and 46 in Rectory-avenue and Rectory-lane, for the U.D.C. M. A. Piercy, engineer and surveyor.

JULY 27.—**Richmond, Surrey.**—BATHS AND LAUNDRY.—Extension to the public baths and provision of a new laundry at Parkshot, Richmond, for the Town Council. Borough Engineer and Surveyor, Town Hall, Richmond. Deposit £1 1s.

JULY 27.—**Sittingbourne.**—HOUSES.—Erection of 20 brick-built houses on Little Glovers Orchard, Bell-road, Sittingbourne, for the U.D.C. M. W. Lashmar, Surveyor, Town Hall, Sittingbourne. Deposit £1.

JULY 28.—**Barnsley.**—HOUSE.—Residence in Hunter's-avenue, off Dodworth-road. R. Goodworth, architect, 5, Market-hill.

JULY 28.—**Dublin.**—RECONSTRUCTION.—Of the dome of the City Hall for the C.B. City Architect, Exchange Buildings, Lord Edward-street. Deposit £3 3s.

JULY 28.—**Edeyrnion.**—HOUSES.—12 houses (6 parlour and 6 non-parlour) near the town of Corwen, for the R.D.C. N. D. Garner, architect, Corwen. Deposit £2 2s.

JULY 28.—**Edinburgh.**—HEATING.—Installation of a heating system at motor-bus garage Annandale-street, for the T.C. E. J. MacRae, A.R.I.B.A., City Architect.

JULY 28.—**Gateshead.**—CONVENIENCE.—Proposed underground public convenience, Chandless-street, for the C.B. Borough Engineer.

JULY 28.—**Ilkley.**—HEATING.—Glasshouses and heating chambers, for the U.D.C. J. M. Gameson, surveyor.

JULY 28.—**London.**—ALTERATIONS AND ADDITIONS.—To the Laundry at the Cottage Homes, Hornchurch, near Romford, Essex, for the Guardians of the Poor of the Parish of Saint Leonard, Shoreditch. Guardians' Architect, F. Danby Smith, F.R.I.B.A., Parliament Mansions, Victoria-street, Westminster, S.W.1. Deposit £2 in Treasury notes.

*JULY 28.—**London.**—EXTERNAL REPAIR, CLEANING AND PAINTING.—Of Pavilion "A" of the Hackney Hospital, 230, High-street, Homerton, E.9, for the Guardians of the Union. Frank R. Coles, clerk to the Guardians, Clerk's Offices, Hackney Union, 2, Sidney-road, Homerton, E.9.

*JULY 28.—**London.**—DEMOLITION AND CONSTRUCTIONAL WORKS.—Pulling down the west wing, including adequate shoring, under pinning and constructional works, also alterations to hospital administration departments, &c., for the Governors of the Middlesex Hospital. Sydney Gordon, Quantity Surveyor, Finsbury House, Blomfield-street, E.C.2. Deposit £5.

JULY 28.—**Rathdown.**—REPAIRS.—For (1) painting and repairs to the nurses' apartments at the Fever Hospital, Loughlinstown; and (2) painting and repairs to the Dispensary, Stillorgan, for the B.G. P. H. McCarthy.

JULY 28.—**Saltash.**—HOUSES.—Forty houses, in the Corporation Field, abutting New-road, for the T.C. Borough Surveyor. Deposit £2 2s.

JULY 28.—**Southampton.**—SCHOOL.—Remodelling of Beaulieu Council school, including the erection of new cloakroom, verandah and offices, &c., for the County Council. A. L. Roberts, County Architect, The Castle, Winchester. Deposit £1 1s., by cheque, payable to the Hants County Council, and crossed "Lloyds Bank, Ltd., Capital and Counties Branch, Winchester."

JULY 28.—**Wembley.**—COTTAGES, &c.—Erection of thirty brick-built cottages and twenty flatted cottages, in the extension of the Christchurch estate, Ealing-road, for the Wembley U.D.C. Cecil R. W. Chapman, Engineer and Surveyor, Council Offices, Wembley. Deposit £2 2s.

JULY 29.—**Berryden.**—GARAGE.—Construction of a steel-framed garage, for the Northern Co-operative Society, Ltd. Messrs. Tawse & Allan, architects, 10, Bon Accord-square, Aberdeen.

JULY 29.—**Holywell.**—HOUSES.—For (a) Gronant, 20 houses; (b) Gwaenysgor, 16 houses; (c) Newmarket, 16 houses, for the R.D.C. F. A. Roberts, L.R.I.B.A., architect and surveyor, Earl Chambers, Mold. Deposit £3 3s.

JULY 29.—**Ossett.**—ROOM.—Extensions to the Healey Mission Room, Healey-lane. C. H. Marriott, Son & Shaw, architects, Church-street Chambers.

JULY 29.—**Penryn.**—HOUSES.—Twenty-two houses, with roads and sewers, on the Helston-road site, for the T.C. P. Edwin Stephens, A.R.I.B.A., Midland Bank Chambers, Falmouth. Deposit £1 1s.

JULY 29.—**Tavistock.**—HOUSES. In the parish of Lamerton, four houses; and in the parish of Lifton, 12 houses, for the R.D.C. A. K. G. Johnstone, clerk.

JULY 29.—**Trowbridge.**—HOUSES.—Seventy-eight non-parlour type houses on the Dursley-road housing site, and also for the construction of a temporary roadway on the site, for the U.D.C. G. W. J. Clark, engineer and surveyor. Deposit £2 2s.

JULY 30.—**Iver.**—ADDITIONS.—To the Iver, Langley and Denham Cottage Hospital. E. E. Slater, architect, Winton Cottage, Taplow, Bucks.

*JULY 30.—**Leek.**—TELEPHONE EXCHANGE.—Erection of, at Leek, Staffs, for the Commissioners of His Majesty's Office of Works. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

JULY 31.—**Bellerby.**—PAINTING.—Painting and decorating Bellerby Church interior. Rev. C. A. White, Bellerby Vicarage, Leyburn, S.O.

JULY 31.—**Dunsland Cross.**—ROOM.—Mission Room at Dunsland Cross. Mr. Toye's Dunsland Station.

JULY 31.—**Gateshead.**—HOUSES.—204 Houses at Bensham Housing estate, for the C.B. Housing Department, Swinburne-street.

JULY 31.—**Oxford.**—SCHOOLS.—Erection and completion of a new special subjects centre and the addition of a classroom to the Girls' Department at the South Oxford schools, situated in St. Aldate's-street, for the E.C. City Estates Surveyor. Deposit £2 2s.

JULY 31.—**Penwerris.**—HOUSE.—Residence at Penwerris, Falmouth. A. J. Cornelius, F.R.I.B.A., architect, Truro.

JULY 31.—**Portloe.**—HOUSE.—Residence at Hillhead A. J. Cornelius, F.R.I.B.A., architect, Truro.

JULY 31.—**Portsoy.**—HOUSING.—Mason, carpenter, plumber, slater, plaster, and painter works, and also for ranges and grates, for the T.C. Town Clerk.

JULY 31.—**Thornaby-on-Tees.**—HOUSES, &c.—(1) 110 non-parlour type houses in pairs; (2) the construction of sewers, in open cutting, comprising approximately 1,300 ft. 9 in. diameter and 1,350 ft. 6 in. diameter, together with all manholes, specials and appurtenant works; (3) construction of roads, comprising kerbing, channelling, formation of new footways and carriageways in tarmacadam, including foundations, also reinforced concrete carriageway; (4) the reconstruction of Mill-lane Sewer, approximate length 400 ft., with 15-in. diameter reinforced concrete tubes, including the underpinning and deepening of existing manholes, and appurtenant works, for the T.C. G. H. Connor, Borough Engineer, Surveyor and Housing Architect. Deposit £2 2s. each.

JULY 31.—**Westhampnett.**—HOUSES.—Twenty-nine houses on the Council sites in the parishes of Felpham and Sidlesham, for the R.D.C. W. D. Rasell, Clerk, Pallant House, Chichester.

JULY 31.—**Worsborough Dale.**—ADDITIONS.—Alterations and additions to the Wesleyan Chapel. W. Beckett, "Hillcrest," Ward Green, near Barnsley. Deposit £1 1s.

AUGUST 1.—**Westport.**—RECONSTRUCTION.—Reconstruction and enlargement of the parish church, Westport, Co. Mayo, for the Rev. P. Patterson, Adm. R. M. Butler, F.R.I.B.A., architect, 23, Kildare-street, Dublin.

AUGUST 2.—**Glasgow.**—RECONSTRUCTION.—Demolition and reconstruction of a double cottage at Standhill, near Bathgate, for the T.C. D. A. Donald, Chief Engineer, 271, Alexandra-parade.

AUGUST 3.—**Dewsbury.**—OFFICES.—Alterations to premises in Market-place, for the C.B. H. Dearden, A.R.I.B.A., Borough Surveyor.

AUGUST 3.—**Royston.**—HOUSES.—Fourteen non-parlour type houses on land situate in High-street, together with roads and sewers, for the U.D.C. Dyson, Cawthorne and Coles, architects, 10, Regent-street, Barnsley.

AUGUST 3.—**Worksop.**—LIGHTING.—Work and fittings in connection with the installation of electric light in 20 semi-detached houses at Carlton, for the R.D.C. A. Edwin Hewitt, surveyor, 66, Bridge-street. Deposit £1.

AUGUST 4.—**Marsden.**—HOUSES.—Forty houses on the Wood's-avenue housing site, for the U.D.C. A. J. Howcroft and Son, architects, 45, Priory-buildings, Union-street, Oldham. Deposit £1 1s.

AUGUST 4.—**Penarth.**—COTTAGE.—Caretaker's cottage and ladies' retiring room proposed to be erected on a site in the Athletic Ground, Lower Penarth, for the U.D.C. Edgar I. Evans, engineer and surveyor. Deposit £2 2s.

AUGUST 4.—**Truro.**—HOUSES.—Thirty parlour houses at Hendra, for the T.C. F. A. Barnes, City Surveyor. Deposit £1.

AUGUST 4.—**Uxbridge.**—HOUSES, &c.—Erection of 6 blocks and 18 pairs of houses, and for roads and sewers, &c., on the Greenway housing estate, Uxbridge, Middlesex, for the U.D.C. William L. Eves, F.R.I.B.A., F.S.I., 54, High street, Uxbridge. Deposit 2 guineas.

AUGUST 5.—**Darlington.**—OFFICES.—At Bank Top Cattle Market, for the C.B. Borough Surveyor.

AUGUST 5.—**Glasgow.**—TENEMENTS.—Fifty-five tenements, comprising 330 houses, at Possil, for the T.C. J. Lindsay, Town Clerk.

AUGUST 5.—**Kilkeel.**—LIGHTING.—For (*a*) cold starting crude oil engine; (*b*) generator, booster and switchboard; (*c*) storage battery; (*d*) pole erection work; (*e*) line erection work; (*f*) erection of power house, for the R.D.C. P. T. White, consulting engineer, 50, Queen-street, Newry. Deposit £1 1s.

AUGUST 5.—**Launceston.**—HOUSES.—Eighteen houses on a site at Dutson-road, for the T.C. J. F. Burford, Borough Surveyor.

AUGUST 7.—**Bootle.**—HOUSES.—120 houses in terraces, to be erected on Hawthorne-road, Aughton-road, Province-road, and Monfa-road, for the C.B. Borough Engineer and Surveyor.

AUGUST 9.—**Easington.**—BUILDING.—Stabling and house at Shotton Colliery, and stabling at Wheatley Hill, for the R.D.C. Surveyor. Deposit £2.

AUGUST 9.—**Hatfield-with-Stainforth.**—SCHOOL.—School at Hatfield-with-Stainforth, Dunscroft, for the West Riding E.C. Education Department, County Wall, Wakefield.

*AUGUST 9.—**Wallasey.**—HOUSES.—Housing Scheme No. 7, erection of 140 (parlour and non-parlour type) on the Lateral-road housing site, for the Corporation. Geo. Livsey, Town Clerk, Town Hall, Wallasey. Deposit £2 2s.

*AUGUST 10.—**Leeds.**—EMPLOYMENT EXCHANGE.—Erection of at Morley, for the Commissioners of His Majesty's Office of Works. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 12.—**Keynsham, near Bristol.**—HOUSES.—Erection of 20 semi-detached parlour-type houses, six in the parish of Saltford and 14 in the parish of Whitchurch, on the Council's housing estate, comprising two types of houses in each case. H. W. Argile, Building Surveyor, 16, High-street, Keynsham. Deposit, ½ guinea in each case, by cheque.

*AUGUST 14.—**Chester.**—ELEMENTARY SCHOOL.—Erection and completion at Grove-street, New Ferry, for 640 scholars, for the County E.C. F. Anstead Browne, F.R.I.B.A., County Architect, Newgate-street, Chester. Deposit £2 2s.

AUGUST 14.—**Windsor.**—COTTAGES.—Pair of semi-detached cottages on land adjoining the pumping station at Blacknest, Sunninghill, Berks, and one detached cottage near the sewage purification works at Whitmoor Bog, for the R.D.C. J. H. Blizard, M.Inst.C.E. Deposit £2 2s.

*AUGUST 18.—**Kensington.**—TELEPHONE EXCHANGE.—Erection of at Kensington for the Commissioners of His Majesty's Office of Works. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners.)

SEPTEMBER 1.—**Athlone.**—HOUSES.—Twelve houses (semi-detached) and the construction of sewers and water mains in connection, for the U.D.C. P. J. O'Loughlin, Town Surveyor, The Courthouse. Deposit £2.

SEPTEMBER 1.—**Athlone.**—Reconstruction of waterworks pump-house and erection of new filter house, for the U.D.C. P. J. O'Loughlin, Town Surveyor, The Courthouse. Deposit £5.

NO DATE.—**Bradford.**—BUNGALOW.—Bungalow, Alwoodley. B. D. Fairbank & Sons, Hallfield Chambers, Bradford.

NO DATE.—**Cardiff.**—RE-BUILDING.—Rebuilding of 28, St. Mary-street, for the Royal London Mutual Insurance Society, Ltd. H. Budgen & Co., 95, St. Mary-street, Cardiff. Deposit £2 2s.

NO DATE.—**Hornby.**—CHURCH.—Wesleyan Church and school, Hornby, near Great Smeaton. H. B. Richardson, architect and surveyor, 50, Skinnergate, Darlington.

NO DATE.—**North Wingfield.**—CLUB.—Miners' Welfare Club, North Wingfield. T. Bamber & Son, architects, Derby-road, Heanor.

NO DATE.—**Queensbury.**—ALTERATIONS.—Alterations to shops and assembly rooms at the Central Stores, Queensbury, for the Queensbury Industrial Society, Ltd. Spencer & Sharp, architects and surveyors, Old Bank Chambers, Great Horton, Bradford.

NO DATE.—**Rochdale.**—PAINTING.—School painting (interior and exterior), for the E.C. J. E. Holden, Education Office.

NO DATE.—**Tavistock.**—HOUSES.—Four houses, for the U.D.C. Surveyor.

NO DATE.—**Wakefield.**—COVERING.—Covering of balcony and bay at White Rose Hospital, for the B.G. W. Harold Watson, F.R.I.B.A., Barstow-square.

MATERIALS, etc.

JULY 26.—**Richmond (Yorks.).**—PIPES.—3,370 yds. of 4 in. diameter cast iron water pipes, coated, four screw-down sluice valves, three air valves, and specials in the form of bends, junctions, and branch pieces, for the T.C. W. W. Foster, Town Clerk.

JULY 27.—**Pontefract.**—PIPES.—Fifty tons of 4 in. diameter cast-iron pipes, for the T.C. W. H Newton Borough Engineer and Surveyor.

JULY 30.—**Grimsby.**—MATERIALS.—Sanitary materials and paints, &c., for the C.B. H. G. Whyatt, Borough Engineer, 170, Victoria-street.

JULY 31.—**Haslemere.**—MATERIALS.—425 tons 2½ in. gauge granite, 476 tons 2½ in. to ½ in. graded tarmacadam, 60 tons ½ in. gauge tarmacadam, and 75 tons ¼ in. gauge tarmacadam, for the U.D.C. C. A. Best, surveyor.

ENGINEERING, IRON AND STEEL.

JULY 26.—**Eastbourne.**—GATES.—Wrought-iron gates and fencing for Gilbert Recreation Ground, for the C.B. L. Roseveare, Borough Engineer.

JULY 26.—**Penarth.**—WIDENING.—Ferro-concrete construction in the carrying out of the widening of the pier, for the U.D.C. L. G. Mouchel & Partners, Ltd., 36-38, Victoria-street, Westminster, S.W.1. Deposit £5 5s.

JULY 26.—**Pontefract.**—SYPHON.—Construction of an 18 in. diameter syphon, about 30 ft. in length, under the stream at Bubwith Bridge, for the T.C. W. H. Newton, Borough Engineer and Surveyor. Deposit £1 1s.

JULY 27.—**Aberdeen.**—REPAIRS.—Of the Pitfodels reservoir at Hillhead, for the Water Works. G. Mitchell, Water Engineer, Water Engineer's Office.

JULY 27.—**Ponlygwellech.**—BRIDGE.—Diversion of the River Ebbw Fach and a new bridge over same at Pontygwellech, Blaina, for the Monmouthshire C.C. S. A. Bennett, County Surveyor, County Hall, Newport Mon. Deposit £1 1s.

JULY 28.—**Birmingham.**—BRIDGE.—Reinforced concrete bridge over the River Cole, on the line of the proposed new road, being an extension of Bordesley Green East, Stechford, for the T.C. H. H. Humphries, City Engineer and Surveyor. Deposit £2.

JULY 28.—**Cork.**—FOOTBRIDGE.—Supply and erection, near Ferry Walk, of a steel suspension footbridge of some 160 ft. span, for the C.B. T. Ireton, Town Clerk. Deposit £1.

JULY 31.—**Okehampton.**—CULVERT.—Culvert and widening of road at Watergate Ford, for the R.D.C. G. A. Friend, surveyor, Northblew.

JULY 31.—**Whitehaven.**—RESERVOIR.—Reinforced concrete service reservoir at Harras moor, for the T.C. The Trussed Concrete Steel Co., Ltd., or A. Wilson, Borough Engineer and Surveyor. Deposit £2 2s.

AUGUST 2.—**Enniskillen.**—DRAINS.—Construction of new main drains at the Workhouse, and also alternative tenders to include the construction of sewage disposal system, consisting of septic tanks and filter beds, for the B.G. J. Donnelly, M.R.I.A.I., architect, Enniskillen.

AUGUST 4.—**Chesterfield.**—SEWERAGE.—For (1) 5,150 lin. yds. of 8-in. to 27 in. diameter stoneware and cast-iron sewers and two pumping stations; (2) 3,687 lin. yds. of 6 in. to 21 in. diameter stoneware and cast-iron sewers; (3) 3,362 lin. yds. of 6 in. to 21 in. diameter stoneware and cast-iron sewers and pumping station, for the R.D.C. H. Taylor, engineer and surveyor. Deposit £2 2s. each.

AUGUST 10.—**Dublin.**—RECONSTRUCTION.—Reconstruction of an overline bridge at Rush and Lusk station, for the Great Northern Railway (Ireland). F. C. Wallace, secretary, Amiens-street Station. Deposit, £2 2s.

AUGUST 13.—**Burley-in-Wharfedale and Menston.**—ADDITIONS.—Alterations and additions to settling tanks, storm-water filters and incidental works, at the sewage disposal works, Skipton-road, Otley, for the Joint Sewerage Board. H. Riding, engineer. Deposit £5.

SEPTEMBER 15.—**Siam.**—BRIDGES.—Superstructures of steel railway bridges, for the Administration of the Royal State Railways of Siam, Bangkok. C. P. Sandberg, 40, Grosvenor-gardens, London, S.W.1. Charge £1 10s.

DECEMBER 1.—**Denmark.**—BRIDGE.—Construction of the superstructure, substructure, as well as approach spans, with shore piers, for a double-track railway bridge across Lillebelt, for the Danish State Railways. Danish Legation, London. Deposit, Danish Kroner 500.

ROAD, SEWERAGE, AND WATER WORKS.

JULY 26.—**Bray.**—MAINS.—Providing and laying down of water mains, fittings and accessories, at Killarney-road, for the Wicklow County Board of Public Health. R. M. Butler, F.R.I.B.A., 23, Kildare-street, Dublin.

JULY 26.—**Dublin.**—PAVING.—In creosoted deal blocks, D'Olier-street and portions of Grafton-street, and College-green, for the C.B. J. J. Murphy, Town Clerk.

JULY 26.—**Finchley.**—PAVING.—Providing and laying creosoted deal blocks, including reinforced concrete foundation in the main roads within the district, for the U.D.C. P. T. Harrison, engineer, 9, The Hawthorns, Regent's Park-road, Finchley, N.3. Deposit £2.

JULY 26.—**Glasgow.**—SEWERS.—Brick sewer in Aitkenhead-road and Glebe-road, for the T.C. J. Lindsay, Town Clerk.

JULY 26.—**Manchester.**—RECONSTRUCTION.—Reconstruction with granite sets on a concrete foundation:—Sackville-street, City, and C.-on.-M., from Granby-row to Mount-street; Tariff-street, City, from Dale-street to Brewer-street; Upper Stanley-street, City, from Brewer-street to Leech-street, and Fairfield-street, City, northerly side, from Travis-street to River Medlock, for the T.C. P. M. Heath, Town Clerk. Deposit £1 1s.

JULY 26.—**Manchester.**—RECONSTRUCTION.—Of the sewer in Ashton New-road, Bradford, from Forge-lane to Gibbon-street and the provision of the necessary manholes, for the T.C. Paving, &c., Department (District Surveyor's Office). Deposit £1 1s.

JULY 26.—**Portslade-by-Sea.**—EXTENSION.—Extending the existing 8 in. diameter public sewer in Locks Hill, Portslade-by-Sea, by about 86 yards, for the U.D.C. D. V. Howard, surveyor.

JULY 26.—**Uttoxeter.**—PAVING.—Laying of granite setts on a concrete foundation in Bridge-street, with all necessary preparatory work, for the U.D.C. S. S Proud, engineer and surveyor. Deposit, £1.

JULY 27.—**Billericay.**—SEWERS.—Construction of sewers, manholes, and incidental work in the private streets of the first portion of the Sunnymede estate, Great Burstead, for the R.D.C. Surveyor, High-street. Deposit £2 2s.

JULY 27.—**Clown.**—EXTENSION.—Laying about four thousand yards of 6 in. and 4 in. cast-iron mains from Barlborough to Spinkhill, for the R.D.C. G. & F. W. Hodson, engineers, Bank Chambers, Loughborough. Deposit £5.

JULY 27.—**Denholme.**—ROAD.—Laying about 596 sq. yds. of concrete flags, taking up existing flags, re-laying kerb, and other incidental works thereto, for the U.D.C. J. H. Ingham, clerk.

JULY 27.—**Gateshead.**—IMPROVEMENTS.—Diversion of road and footpath, excavation and trimming of the river bank, and the construction of a sloping river wall, &c., at Tyne Main, Gateshead, for the Improvements Commission. A. Blacklock, secretary, Tyne Improvement Commission Offices, Bewick-street, Newcastle-upon-Tyne. Deposit £2 2s.

JULY 27.—**Ilford.**—SEWER.—Construction of a sewer from The Fairlop Oak public house, Fulwell Hatch, to the existing sewer in New North-road, consisting of about 2,314 lin. yds. of 12 in. and 9 in. stoneware pipes, with 23 manholes, for the U.D.C. H. Shaw, engineer and surveyor. Deposit £2 2s.

JULY 27.—**South Shields.**—MAKING-UP.—Of certain streets on the Bede estate, Whitburn, for the R.D.C. T. E. Gilchrist, surveyor and architect, Council Offices, East Boldon.

JULY 27.—**Watford.**—SEWERS.—Construction of two short lengths of sewer with manholes and other work in connection therewith, at Gallows Hill-lane, and Tanners Hill, Abbots Langley, for the R.D.C. Surveyor, 9, Market-street. Deposit £1 1s.

JULY 27.—**Willesden.**—PAVING.—Artificial flag paving supplied and laid in any road within the district of Willesden, for 40,000 yds. super; new granite pitching on 12 in. concrete, Harrow-road, Willesden Junction-bridge, 750 yds. super; new granite pitching on 12 in., concrete, Neasden-lane, 970 yds. super; new granite pitching on 12 in. concrete, Station-road, Willesden-green, 1,840 yds. super, for the U.D.C. F. Wilkinson, engineer, Town Hall, Dyne-road, Kilburn, N.W.6.

JULY 27.—**Willesden.**—MAKING-UP.—For (1) Liddell-gardens, (2) Palermo-road, (3) Burnley-road, (4) Kendal-road, for the U.D.C. F. Wilkinson, engineer, Town Hall, Dyne-road, Kilburn, N.W.6.

JULY 28.—**Cheadle and Gatley.**—CULVERT.—Twenty yards of reinforced concrete culvert, for the U.D.C. P. Hewson Molyneux, Council Offices, Cheadle.

JULY 28.—**Great Crosby.**—RECONSTRUCTION.—Reconstruction of a portion of Liverpool-road, which comprises the laying of 10,000 yds. of asphalt carpeting and concrete foundation, flagged footways, and other incidental works, for the U.D.C. J. A. Wright, surveyor. Deposit £2 2s.

JULY 28.—**Haslemere.**—MAKING-UP.—Of Derby-road, Church-road, for the U.D.C. C. A. Best, surveyor, West-street. Deposit £1 1s.

JULY 28.—**Hull.**—SEWER.—Construction of a joint sewer on the Hessle-road (Hull-road) between Anlaby Park-road and the City boundary, for the T.C. and the Hessle U.D.C. F. W. Bricknell, City Engineer; W. Coulson, Surveyor to the U.D.C.

JULY 28.—**Ramsbottom.**—PAVING.—525 tons 4 in. by 5 in. granite setts (British) of sound quality, well dressed, no sett to exceed 9 in. in length; (2) granite paving in lieu of existing local setts, 2,100 sq. yds., to be laid on strengthened foundation in Bolton-street; and (3) 5,750 sq. yds. of tarmacadam, 4 in. consolidated thickness, to be laid on Helmshore-road, for the U.D.C. T. H. Bell, Surveyor.

JULY 28.—**Wembley.**—SEWER.—Construction of about 632 yds. of 9 in. diameter glazed stoneware pipe sewer, complete with manholes, for the U.D.C. C. R. W. Chapman, engineer and surveyor. Deposit £2 2s.

JULY 28.—**Whitley and Monkseaton.**—SEWERS.—Construction of concrete tube relief sewers and alterations to existing manholes, &c., complete, between Naters-street and Eskdale-terrace, for the U.D.C. Surveyor. Deposit £1 1s.

JULY 30.—**Wellington.**—WIDENING.—Widening, reconstruction, and final surfacing in tarmacadam or asphalt of the main road between Haygate and the Cock Inn, for the Salop C.C. W. H. Butler, County Surveyor, County Buildings, Shrewsbury. Deposit £5.

JULY 31.—**Bakewell.**—MAINS.—2,300 yards of 3-inch, 350 yards 4-inch, and 60 yards 2-inch gas and water mains, for the U.D.C. W. G. F. Kingston, Engineer and Surveyor, Market Hall.

JULY 31.—**Bakewell.**—SEWER.—Construction of a 9-in. sewer from Pickford Villas to the new hospital in Monyash-road, approximately 715 yards, for the U.D.C. W. G. F. Kingston, Surveyor, Market Hall. Deposit £1-1s.

JULY 31.—**Greenock.**—WATER SUPPLY.—Construction of a filter, supplying, laying and jointing cast-iron pipes, valves, special castings, fireclay pipes, cutting and filling trenches, and other relative work, at Smithston, for the P.C. Geo. R. Blake, C.E., 88, Great Clyde-steet, Glasgow. Deposit £1 1s.

JULY 31.—**Hambledon (Surrey).**—MAKING-UP.—For (1) Mount-road, (2) The Mount, (3) Ridge-road, (4) Mead-road, (5) New Park-road, (6) Grove-road, for the R.D.C. S. B. Hasell, surveyor, High-street, Bramley, near Guildford. Deposit £3.

JULY 31.—**Margate.**—MAINS.—Supplying and laying approximately 361 yds. of 3 in. water main with the necessary hydrants and fittings, on a new housing site, at Woolage Green, Womenswold, near Canterbury, for the T.C. Borough Engineer and Surveyor, 13, Grosvenor-place.

JULY 31.—**Teddington.**—MAKING-UP.—770 sup. yds. concrete in carriageway, 990 lin. yds. granite kerb, 2,485 sup. yds. artificial paving and other works, in Elmfield-avenue, for the U.D.C. Marshall Hainsworth, surveyor. Deposit £2 2s.

AUGUST 2.—**Northwich.**—SEWER.—Construction of about 80 lineal feet of steel sewer on three pile frames across the River Dane, for the U.D.C. J. Brooke, engineer and surveyor. Deposit £2 2s.

AUGUST 3.—**Macclesfield.**—SEWER.—Construction and laying of approximately 200 yards of 9in. sewer and 3,000 yards of 6-in. sewer, with 35 manholes complete, along highways and private roads in Poynton-with-Worth, for the R.D.C. G. Clayton, Housing and Town-Planning Surveyor, 19, King Edward-street.

AUGUST 3.—**New Hunstanton.**—MAKING-UP.—Of a portion of Sandringham-road, for the length of approximately 585 lin. yards, for the U.D.C. F. Wilkinson, engineer and surveyor.

AUGUST 3.—**Royston.**—SEWER.—Laying of a new 9in. sewer in High-street, together with the building of manholes, for the U.D.C. Dyson, Cawthorne & Coles, surveyors, 10, Regent-street, Barnsley.

AUGUST 6.—**Barnsley.**—MAKING-UP.—Of Wilby-lane, Locke-avenue, Seth-terrace, and certain back roads, for the C.B. Borough Engineer.

✱NO DATE.—**South Harrow.**—SEWERS AND ROADS.—Construction of approximately 200 yds. of sewers and road work on a private estate at South Harrow. Terry & Smith, estate agents, Northolt-road, South Harrow.

Competitions.

(*See Competition News page* 120.)

Auction Sales, Tenders, etc.

✱JULY 27.—**Balham.**—F. H. Clark will sell, without reserve, at Thornton House, Atkins-road, Balham, clearance sale of hutting, greenhouses, timber and building materials, girders, &c. Auctioneers, Victoria House, 117, Victoria-street, S.W.1.

✱JULY 27.—**London.**—Veryard & Yates will sell, without reserve, at 255, Clapham-road, S.W., timber, fittings and buildings materials. Auctioneers, 365, Norwood-road, S.E.27.

✱JULY 27.—**West Norwood.**—Henry J. Shaw will sell on the premises, 125A, Hamilton-road, West Norwood (at a ridiculously low reserve), the above freehold, consisting of large warehouses, yard, office, and a small cottage (with possession upon completion). The whole of the stock and plant will be sold in lots immediately following the sale of the premises, and continue on the following day: Lorries, touring cars, motor cycle, paints and varnishes, and other builder's requisites. Auctioneers, 85, Newington-causeway, S.E.1.

JULY 27, 28 AND 29 (postponed)—**Glossop.**—W. Davies & Son will sell in conjunction with Perry & Phillips, on the premises, Glossop Hall, the whole of the valuable interior and exterior fixtures and fittings previous to demolition of the mansion. Auctioneers, W. D. & Son, 9, Albert-square, Manchester, or P. & P., High-street, Bridgnorth.

JULY 28.—**St. Albans.**—Stimpson, Lock & Vince will sell, at the "Pea Hen" Hotel, St. Albans (unless sold privately in the meantime), freehold mansion, "Marshalswick," St. Albans, comprising 23 bedrooms, &c., to be sold for conversion into school, hotel, &c.; also 50 acres of building land in convenient parcels. Auctioneers, 35, Chequer-street, St. Albans.

✱JULY 29.—**Hockley, Essex.**—H. W. Smith & Moon will sell, in liquidation, *re* Edmund Sears, Ltd., by Order of the Liquidator, at "Sunny Mead" estate, Billericay and Hockley Rise estate, Hockley, builders' and contractors' stock and plant. Auctioneers, 6, Great James's-street, Bedford-row, W.C.1.

SEPTEMBER NEXT.—**London.**—Knight, Frank & Rutley will sell at the Hanover-square Estate Room (unless previously sold privately), freehold residential and building estate, known as Greenhill Park, Barnet, residence, lodge, &c. Auctioneers, 20, Hanover-square, W.1.

Public Appointments.

JULY 26.—**Edmonton.**—General Foreman (Trade Unionist) required by the Education Committee to act under the direction of the Architect during the construction of two practical instruction centres (brick buildings) at two schools. E. O. Taylor, Director and Secretary, Education Offices, Brettenham-road, N.18.

JULY 27.—**Acton.**—Temporary Town-Planning Assistant required by the Borough Council. Borough Engineer, Municipal Offices, Acton, W.3.

✱JULY 28.—**Bethnal Green.**—CLERK OF WORKS.—Required in connection with the erection of the new public baths and washhouses, Old Ford-road, Bethnal Green (costing approximately £100,000), by the Metropolitan Borough Council. David J. Keep, Town Clerk, Town Hall, Bethnal Green, E.2.

JULY 29.—**Burley-in-Wharfedale.**—Clerk of Works required in connection with the erection of 54 houses for the U.D.C. Council's Surveyor, Council Offices, Burley-in-Wharfedale.

✱JULY 30.—**York.**—Two temporary Architectural Assistants required by the Corporation. F. W. Spurr, City Engineer, Guildhall, York.

JULY 31.—**Rangoon.**—EXECUTIVE CIVIL ENGINEER.—Required by the Rangoon Development Trust. The engagement in the first instance will be for a period of three years, but it is possible that a permanent appointment may follow. J. Lumsden Rae (Reference R.2530), Dartmouth House, 2, Queen Anne's-gate, London, S.W.1.

✱AUGUST 2.—**Oldham.**—CLERK OF WORKS.—In connection with the erection of public conveniences in reinforced concrete (the appointment being a temporary one), required by the County Borough Council. J. Ashurst, Borough Engineer and Surveyor, Town Hall, Oldham.

✱AUGUST 14.—**Norfolk.**—Temporary appointment of Architectural Assistant to the County Surveyor for a period of at least six months in the first instance, with probable extension, required by the County Council. County Surveyor, Queen-street Chambers, Queen-street, Norwich.

✱NO DATE.—**London.**—TEACHER.—Of land surveying, levelling, and field surveying on alternate Saturdays. Apply, Secretary, Northern Polytechnic, Holloway, N.7.

✱NO DATE.—**Tottenham and Willesden.**—Instructor for Building Construction and Design for evenings at Tottenham Polytechnic. H. P. Shallard, M.A., The Polytechnic, High-road, N.15, on receipt of a stamped addressed foolscap envelope. Teacher for Advanced Building Construction for evenings at Willesden Polytechnic. The Principal, Willesden Polytechnic, Priory Park-road, Kilburn, N.W.6.

✱NO DATE.—**Watford.**—PART-TIME TEACHER.—Of carpentry and joinery, for City & Guilds Final. Principal, School of Science, Watford.

TRADE NEWS

Partnership.

Messrs. Henry Butcher and Co., of 63 and 64, Chancery Lane, W.C.2, have admitted into partnership Mr. Charles Fuller Hall, a Fellow of the Auctioneers' Institute, and in future the firm will be styled "Henry Butcher, Hall & Co."

Change of Address.

The British Reinforced Concrete Engineering Co., Ltd., having recently removed their head office and works from Manchester to Stafford, have now opened a branch office for Lancashire at their old Manchester address, No. 1, Dickinson-street. This will take the place of the Liverpool office, which was previously used as the branch office for Lancashire.

An Improved Adjustable Window Fastener.

The accompanying illustration shows the various working parts of a new adjustable window fastener called the "Almanco," recently introduced by the Almanco Engineering Co., of Wellingborough. The construction of this useful fitment is as follows: The boss of the handle has two accurately machined coned seatings, into each of which is fitted a gun-metal cone of corresponding angle. Each cone is split through its entire length, the back plate is drilled and tapped with a fine thread, the screw with its gun-metal spring washer under its head is placed through the two cones and screwed into the plate and locked by the lock-nut. The handle plate is then screwed into position on the frame of the opening light. If, after years of wear, adjustment becomes necessary, all that need be done is to remove the handle plate by taking out the four screws, loosen the nut, screw in the centre pin, relock the nut, and place in position again. The whole operation occupies less than five minutes, and

may be done by any inexperienced person. It will be seen by the foregoing description that, when the screw is tightened up, the cones, being split, are closed on to the centre pin, which eliminates all rattle. The two cones when in position do not quite meet in the centre of the boss; this recess is used as a store for thick lubricating graphite paste, which lasts for many years and does away with the unpleasantness caused by using ordinary lubricating oil.

We understand that the manufacturers are prepared to supply these handles to any other manufacturer of metal windows and to the building trades in general, in any design to suit customers' requirements.

Correction.

With regard to the tender for 100 houses for the Greenwich Borough Council, published in our last issue, Messrs. Thomas & Edge write to point out that their contract is only for the completion of the houses, which were commenced by another firm. About £10,000 worth of work had been done before Messrs. Thomas & Edge took over.

SERVICES OFFERED.

(*Continued from page* lxxxix.)

PLUMBING, Hot-water and Zincwork. First-class work; competitive price; labour and solder.—A. S., 12, Newlyn-road, Tottenham, N. 17.

PLUMBING (Regd.), all branches. New, alteration, jobbing.—"PLUMBUM," 13, Esher-street, Kennington, S.E. 11.

GROUNDWORK and DRAINS wanted, any quantity, by experienced navvy.—Write, T. STROUD, 16, Hazeldean-road, Harlesden, London, N.W.10.

HANDY MAN, good Jobbing Plumber, hot-water, electric light; fill in time painting; used to old-established West End jobbing shop. Age 44.—10, Paxton-street, S.W. 8.

BRICKLAYER. Garage, bungalows, alterations, extensions, or house; day or price; town or country.—J. M., 180, Manor-place, Walworth, S.E.

WANTED.—BRICKWORK and POINTING. Town or country.—FRYERS, 98, Chapman-road, E. 9.

WANTED.—CARPENTERING, Brickwork and Groundwork, labour only; estimates free; work quickly executed.—W. BAKER, 7, St. Mary's-place, Ealing, W. 5.

GRANOLITHIC PAVING, etc., wanted; any distance; labour only.—G. W., 146, Winchester-road, Lr. Edmonton, London, N. 9.

BRICKWORK and POINTING wanted by experienced man.—A. B. H., 27, Poyle-road, Tottenham, N. 17.

POINTING wanted, day or piecework; own scaffolding. Estimates free. Good references.—G. WHITE, 7, Burlington-road, Lansdown-road, Tottenham, N. 17.

BRICKWORK, POINTING to Trade; own plant; any dist.—F. R., 6, Ash Tree-grove, Wandsworth, S.W. 18.

BRICKWORK and POINTING wanted. Brickwork from £8 per rod and Pointing from 12s. per square; or would consider a job as Foreman Bricklayer on large housing contract or on speculating job on a wage and bonus basis. Distance no object.—Write or call, L. WONACOTT, 37, Tunley-road, Craven Park, London, N.W. 10; or 'Phone Willesden 4865 after 6.30.

WANTED.—Brickwork, Pointing, Dilapidations, any quantity, with or without plant.—CAVE BROS., 174, Villiers-road, Cricklewood.

WORKING GENERAL FOREMAN (trade: Bricklayer) seeks engagement. Good practical knowledge of all trades; energetic; good manager. Good refs. Town or country.—G. H., 171, Southfield-road, Bedford Park, W. 4.

WANTED.—BRICKWORK, POINTING, weather or tuck; alterations, dilapidations, and plastering.—EMMETT, 76, Glengall-rd., Peckham, S.E.15.

BRICKWORK, Carpentering, Groundwork and Plastering Contractors. Reliable staff. Estimates free.—WILLETT BROS., 86, Haynt-walk, Merton Park, S.W. 20.

HANDY MAN. Brick, plaster, roofs, drains, alterations, all house repairs; good all round. Good refs. Take charge if req.—W. PEEL, 111, Wilsham-street, W. 11.

BRICKWORK, POINTING wanted, tuck or weather joint; dilapidations; own plant.—W. J. WENDUST, 55, Cowper-road, Stoke Newington, N. 16.

17S. PER SQUARE POINTING wanted to any amount; also dilapidations. Best refs.—W. J. SOUTHGATE, 483, Wharncliffe-gardens, St. John's Wood, N.W. 8.

WANTED.—POINTING, tuck or weather-joint. Town or country. Good refs.—H. GARDNER, 18, Ann's Terrace, Cobourg-road, Camberwell, S.E. 5.

PLASTERING wanted plain and ornamental; slab partitions supplied, fixed, and plastered; labour and material only; large City or West End job preferred; gang of Plasterers available.—Apply, W. E. BRITTAIN, 28, Mervyn-road, Ealing, W. 13. 'Phone: Ealing 2255.

PLASTERING required; new or alterations. Refs. if required.—WM. CHARLES, 37, Suffolk-road, Ripple-road, Barking, Essex. 'Phone: Grangewood 1611.

PLASTERING required, any quantity; quotations for immediate work.—W. G., 49, Palmerston-road, Buckhurst Hill.

PLASTERING, Solid, Fibrous, Breeze Partitions, Cement work, Granolithic Stairs, Floors; good-class work wanted by energetic man.—JAMES, Shrewsbury-court, Whitecross-street, E.C. 1.

WANTED.—PLASTERING, Slabbing and Renovations; just completed twelve-months' job.—Box 263, Office of "The Builder."

Housing Deputation to Ministers.

The National Housing and Town-Planning Council has arranged for a deputation, consisting of delegates from local authorities in England, Wales, and Scotland, and a number of prominent housing reformers, to wait upon the Minister of Health and the Secretary of State for Scotland on July 27. The subjects to be dealt with will include the financial provisions of the 1923 and 1924 Housing Acts, the maintenance of good standards of planning, design, and construction in housing schemes, slum and rural problems, and town planning.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ABERCARN.—The Llandover Estate Trustees have agreed to proceed with the erection of 150 houses at Llanfael.

ALDENHAM.—Herts E.C. are inquiring as to the need of additional elementary school accommodation.

BAMPTON.—The U.D.C. has decided to invite tenders for the erection of 24 houses at Bampton, and eight at Shillingford.

BARGOED.—A new hall is to be erected by the West Monmouth Mission at a cost of about £17,000.

BARNES.—Surrey E.C. has instructed the surveyor to procure without delay a site for the erection of an elementary school.

BARNET.—The Managers of the East Barnet Valley School have obtained land in Margaret-road for a future extension of the school.—The R.D.C. has instructed the Surveyor to prepare estimates for the erection, by direct labour, of 57 houses in various parts of the district.

BIERLEY.—The Corporation are to erect 16 combined houses and shops by direct labour at an estimated cost of £17,398. The M.H. has sanctioned the scheme.

BISHOP'S STORTFORD.—Herts E.C. has approved plans for the erection of an elementary school for about 336 children, at a cost of £14,000.

BLACK NOTLEY.—Essex C.C. has now been able to obtain land for the extension of the Sanatorium.

BOLTON.—The L.M.S. are to construct a girder bridge over the new road from Blackburn-road to Bury-road.—The Housing Committee has discussed the town-planning scheme with surveyors and estate agents.—The managers are preparing a scheme for modernising the St. Patrick's Roman Catholic schools.

BOURNEMOUTH.—Further progress was reported on the building of the Pavilion. Under the first contract only about £6,000 of work remained to be done. Plans designed to save cost are under consideration involving the omission of the mezzanine gallery from the scheme and the addition of a small hall.

BRADFORD.—Extensions and alterations are to be carried out at the Eastbrook Hall, Leeds-road, at an estimated cost of £2,300.

BRAUNSTON.—Northants C.C. are in negotiation with the Oxford Canal Navigation regarding the reconstruction of Boswells Bridge, the cost of the scheme being estimated by the County Surveyor at £3,800.

BURHAM.—The U.D.C. has received the sanction of the M.H. to borrow £11,762 for housing purposes.

CARRICK-ON-SUIR.—A sum of £2,308 is to be spent in the erection of the new technical school.

CHERTSEY.—The R.D.C. has under consideration a proposal for the erection of 24 houses.

CROYDON.—The C.B. passed plans: Corporation, sub-station, Silverleigh-road; H. W. Seale, 10 houses, Brading-road; Corporation Electricity Department, sub-station, Bingham-road; W. G. Ingram, 38 houses, Florida-road, from Brickfield-road, and 14 shops with living accommodation over, Green-lane, from Carolina-road; Powell & Foster, 13 houses, Limes-avenue, from Wandle-side; Thomas & Sons, 53 houses, Norbury Croft-road.

CWMBRAN.—The Monmouthshire County E.C. recommend the erection of a new central school.

DARTFORD.—The M.H. has agreed to the erection of an additional 40 houses at Horns Cross, Stone, 24 houses at Horton Kirby, and 10 at Kingsdown, for the R.D.C.

DATCHET.—Datchet has succeeded in raising the sum of £4,600 for rebuilding the Church of England Schools.

DORKING.—The Surrey E.C. are considering the purchase of a site for the erection of a sec ondary school from the Cubitt Estates, Ltd.

DOUGLAS (I.O.M.)—The Corporation propose a scheme for extending the electricity undertaking, at a cost of £77,000.

DOWNHAM.—Arrangements have been made by the L.C.C. for a further development of the Downham estate by the erection of 698 houses and flats, at a total cost of £689,000.

EASTBOURNE.—It is proposed to erect a municipal garage for the accommodation of 60 motor-coaches.

EAST HAM.—The C.B. has passed plans for: Revised plan of wards, East Ham Hospital, Shrewsbury-road (F. E. Mennie and C. B. Smith); 24 houses, 88–108 and 128–152, Sandford-road (S. H. Anstead); presbytery, Newland-street, Silvertown (Marshall & Partners); 9 houses, 12–22 and 39–43, Dersingham-avenue (G. H. Strickland); and presbytery, Green-street, adjoining Roman Catholic Church (T. H. B. Scott).

EAST PRESTON.—The R.D.C. has received the M.H. sanction to a loan of £200 for the purchase of land for the erection of cottages in Clapham.

EPSOM.—The U.D.C. propose the erection of a further 30 houses.

ESHER AND THAMES DITTON.—The U.D.C. are proposing to erect 114 more houses.

FALMOUTH.—The Corporation are to erect 99 more houses.

FARNHAM.—A scheme for the erection of 70 houses is being considered by the U.D.C.

FOLKESTONE.—The T.C. has sanctioned plans by W. Smith for 52 houses in Archer-road, 41 houses in Bolton-road, eight houses in Dawson-road, 10 houses in Ken-road and nine houses in Baldwin-terrace.

FRIMLEY.—The B.E. has approved the site to be acquired for the Camberley Secondary School, and that the sanction of the M.H. has been obtained.

GLASGOW.—The Second National Housing Co. (Housing Trust), Ltd., has obtained a licence from the Dean of Guild Court to erect steel houses on the line of a new road from Blochairn-road to Alexandra Parade, the cost of the road being estimated by the City Engineer at £4,500. Land is being acquired at Barrhead-road for a branch library for the Pollokshaws district and a recreation ground. The City Engineer is preparing plans for washhouse and slipper bath accommodation at Barrowfield-street. A convenience is to be erected in North-street, Whiteinch. Lavatories are to be erected at Pollock Grounds at a cost of £1,750, and in Springburn Park at a cost of £1,000. The Housing Committee are considering the erection of a social centre at Hamiltonhill.

GODALMING.—The B.E. has approved the purchase of the site for a secondary school to be erected by the Surrey E.C., and the M.H. has sanctioned the raising of the necessary loan of £2,400.

GUILDFORD.—On the recommendation of the Housing Committee, the R.D.C. has decided to submit to the M.H. for approval the following schemes: Pirbright (12 houses), Pattenham (3), East Clandon (12), Merrow (12), Pathfield, Shere (6).

HARPENDEN.—Herts E.C. has acquired a site at Manland Common for the erection of an elementary school.

HORNCASTLE.—The Lindsey C.C. has commenced the widening of the Town Bridge.

HOUGHTON-LE-SPRING.—The R.D.C. has obtained sanction from the M.H. to build an additional 100 houses.

HOVE.—The Hove Council are purchasing 53 acres of land on the old Shoreham road from the Brighton Corporation for housing purposes.

JARROW.—The T.C. is seeking permission from the M.H. to erect a further 100 houses.

KETTERING.—The U.D.C. are to provide a maternity ward at the District General Hospital.

LACKEY.—The bridge on the Fermanagh-Monaghan border, near Clones, is about to be rebuilt.

LARNE.—The U.D.C. has decided to acquire a site on the old Glenarm-road, on which to erect an up-to-date public abattoir. It has been agreed to make application to the Ministry of Home Affairs for sanction to a loan of £8,000 for the erection of working-class houses.

LEEDS.—Plans have been prepared and tenders are shortly to be invited for the erection of two electricity transformer sub-stations for the Electricity Committee. The proposed sites are at Grange Moor-drive, Headingley, and the Drill Ground, Claypit-lane.—A new elementary school is to be built on the Hawksworth housing estate.

LEYTON.—Compulsory powers are being obtained by the Essex E.C. to acquire land for the site of the proposed new secondary school.

LONDON.—The L.C.C. has sanctioned expenditure as follows: Repairs to Pool bridge, £300; repairs to decking and paving of Hammersmith bridge, £2,000; remedial works to Westminster bridge, £8,000; repairs to kerb of Westminster bridge, £500; repairs to river wall and dock entrances of the Chelsea-embankment and Grosvenor-road, £1,000; adaptation of cottage for head-keeper's quarters, Kenwood, £300; renewal of bridge, Manor House-gardens, £125; extension of women's conveniences, Brockwell Park, £100; repairs to the west tea room, £155, repairs to service buildings and cottages, £100, sanitary arrangements at golf house at Hainault Forest; erection of verandah at refreshment house, Hilly-fields, £216; repainting of bridges carrying Kentish Town-road, Junction-road, and Holloway-road over the London, Midland & Scottish Railway, £375; Cane Hill mental hospital: Provision of a verandah, £480; additional sanitary accommodation, £500; renewal of w.c. pans in two wards, £375; provision of cinematograph, £650; construction of a sewer, £2,000; rearrangement of radiators and heating pipes and provision of additional radiators, £400.

LONDON (BROMLEY HILL).—The L.C.C. has sanctioned the erection of 26 lock-up garages on a site at the rear of shops in Ashgrove-road, by A. Frampton.

LONDON (CATFORD).—The L.C.C. has approved plans for the erection of 24 houses in Blacklands-road, by A. J. Glock, and a church for the parish of St. John's, Catford, in a proposed new road between Whitefoot-lane and Bromley-road, Catford, by Sir Charles A. Nicholson, Bart.

LONDON (ELTHAM).—The Blackheath Wesleyan Circuit are negotiating for a site for a new Wesleyan church on the Woolwich B.C.'s housing estate on Eltham Hill.—The L.C.C. has approved the erection of 16 houses on a site at the corner of Green-lane and Southwood-road, West Eltham, by J. Gill.

LONDON (HACKNEY).—The B.C. has approved the recommendation of the L.C.C. for G. Coles, F.R.I.B.A., new building, Margaret-street.

LONDON (ISLINGTON).—The Committee of the North Islington Infant Welfare Centre have prepared a scheme for extensions at a cost of £7,500.

LONDON (LAMBETH).—The L.C.C. recommend the borrowing by the B.C. of £2,050 for housing purposes within the borough.

LONDON (WALWORTH).—The sum of £247 is to be spent on improvements at Newington Public Hall.

LONDON (WOOLWICH).—The L.C.C. recommend the borrowing by the B.C. of £862 for works at its depot and wharf.

MALDEN.—Malden and Coombe U.D.C. have prepared a further scheme for the erection of about 30 flats.

MANCHESTER.—The Rev. A. L. Robinson and the parishioners of St. John's Church, Ashley-lane, Moston, are proposing to erect a new institute. The plans are being prepared by Mr. R. Martin, diocesan architect, 90, Deansgate.

MARGATE.—The T.C. has passed plans: 14 houses, Invicta-road, for S. Crofts; eight houses, Dane Valley-road, and eight houses, Invicta-road, for Wood & Co.; eight cottages, Barn-crescent, for T. Wing.

MIDSOMER NORTON.—The U.D.C. has approved plans presented by Mr. Picton, of Bath, for new Church of England schools proposed to be erected at Dymborough-gardens, at the rear of the present school, to accommodate 160 scholars.

MOLESEY.—The Council are negotiating for land for the erection of 40 more houses.

MUCH HADHAM.—Herts County Surveyor has prepared a scheme for bridging the ford at Standon-road, at a cost of £1,750. The Managers of the Church of England School propose a scheme for the enlargement of the premises.

NEWCASTLE.—The E.C. has obtained sanction for a loan of £121,500 for the erection of a secondary school at Heaton. A scheme has been prepared for widening the railway bridge at Welbeck-road at a cost of £5,000. The Mental Deficiency Committee recommend the purchase of Whinney House, Scotley Bridge, for conversion into a mental institution, the cost of necessary works being estimated at £100,000.

NORTHAMPTON.—The Town and County Association for the Blind are to adapt premises in Gray-street for workshops and administrative purposes.

NORTHAMPTONSHIRE.—The C.C. has approved a scheme for the reconstruction of 14 miles of the Northampton-Market Harborough road, at an estimated cost of £140,000. Tenders will be invited.

OXENDEN.—The R.D.C. are preparing a housing scheme for the Braybrooke district.

PORTSMOUTH.—The E.C. has now had sanction for an expenditure of £3,500 upon the extension of the Southern Secondary School for Girls, and tenders are now to be invited.—The new Mikado Cafe is to be erected on the site of the old coastguard station, Southsea.—In view of the proposed erection of a further 200 houses at Cosham a site for an elementary school is under consideration.—Plans have been passed for 70 houses and flats at Stamshaw, and tenders will shortly be invited.—A modified scheme, to cost £2,250, has been prepared for the conversion of White Hart barracks into 12 flats.—Plans have been prepared by the City Engineer for workshops for the blind at Portsdown Hill, at a cost of £8,500.—A site at Park-road is to be obtained for purposes of a Municipal College.—The T.C. passed plans: J. F. White, 30 houses in Dunbar-road; R. Winnacott, 13 houses in Devonshire-avenue; W. C. Stigant, eight houses in Parwick-avenue, Cosham; P. Price, eight houses in St. John's-road; E. T. Hughes, 27 houses in Kenyon-road; R. J. Winnacott, 11 houses in Randolph-road.

ST. ALBANS.—Herts C.C. has obtained 130 acres adjoining Hill End Hospital estate for the erection of a mental deficiency institution. Mr. H. Carter Pegg, F.R.I.B.A., is to prepare plans.—The County E.C. promise to consider a request for the establishment of a secondary school for girls.—The T.C. recommend that application be made to the M.H. for sanction to a loan of £2,630 for the purchase of land abutting on Old London-road and Cotton Mill-lane for housing purposes.

SANDWICH.—The M.H. has approved of fourteen non-parlour type houses, for the T.C.

SCARBOROUGH.—Tenders are to be invited for the extensions to the Westminster Bank at St. Nicholas-street. Mr. G. H. Fawcett, architect.

SEVERALLS.—Essex C.C. has obtained sanction to borrow £5,500 for extensions at the mental hospital.

SMALLFORD.—St. Albans R.D.C. has decided to ask the M.H. for permission to erect 20 houses.

SMEATON.—The Hemsworth R.D.C. are to acquire a site for houses, also at South Kirby and South Hiendley.

THETFORD.—Alterations and extensions, involving the expenditure of £1,100 at the Cottage Hospital, have been decided upon by the Hospital Committee.

THURLES.—The County Council of Tipperary (N.R.) has applied for sanction to borrow £2,000 for the purpose of erecting technical schools.

TORQUAY.—The T.C. has reported that a conference has been arranged by the M.H. for representatives of the C.C., the Newton Abbot and Totnes R.D.C.'s, and the Corporation, respecting the Corporation's application for approval to the inclusion in the Torquay Town-Planning (Extension) Scheme of land within the areas of the Newton Abbot and Totnes Rural Districts.

TREDEGAR.—The U.D.C. has decided to erect 50 houses.

UPTON.—Plans have been prepared for 262 houses by the Industrial Housing Corporation of Great Britain; the plans have been approved by the R.D.C. The houses are to be erected for the Upton Colliery Co., Ltd.

VANGE.—Essex E.C. has acquired land for the provision of additional school accommodation.

WALTHAMSTOW.—Essex C.C. are acquiring a site at St. Mary's-road for the erection of a tuberculosis dispensary.

WALTON.—The U.D.C. has under consideration a scheme for the erection of 50 houses.

WATFORD.—Herts E.C. are negotiating with the Corporation for the acquisition of the library premises in Queen's-road for purposes of extending the School of Science and Art.—The County E.C. has made a grant of £400 to the Governors of the Girls' Grammar School for various additions and improvements.—The M.H. has held an inquiry into the scheme of the Corporation for sewerage at Cassiobury Park estate, at a cost of £37,000.—Tenders are to be invited for the erection of 22 houses on the Harebreaks estate.—The Rev. A. Payne, of Christ Church, is completing the purchase of a site for a church on the Harebreaks estate.—Conveniences are to be erected at Watford Fields and Church-street, at a cost of £560.

WINCHESTER.—The R.D.C. has decided to make application to the M.H. for sanction to borrow £14,000 for housing.

* See also our List of Contracts, Competitions, etc.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.

	£ s. d.
Best Stocks	4 5 6
Second Hard Stocks	3 19 6

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
Flettons, at	£ s. d.		
King's Cross	2 13 3	Best Blue Pressed Staffs	9 5 0
Do. grooved for Plaster	2 15 3	Do. Bullnose	9 15 0
Do. Bullnose	3 8 3	Blue Wire Cuts	7 5 0
Best Stourbridge Fire Brick:—			
2½ in.	8 11 0	3 in.	10 3 0
GLAZED BRICKS—			
Best White Ivory, and Salt Glazed Stretchers	21 10 0	D'ble Str'tch'rs	30 0 0
		D'ble Headers	27 0 0
Headers	21 0 0	One Side and two ends	31 0 0
Quoins, Bullnose and 4½ in. Flats	28 0 0	Two Sides and one End	32 0 0
		Splays and Squints	29 10 0

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.

	s. d.		s. d.
2 in. per yd. super	1 11	3 in. per yd. super	2 9
2½ in. " "	2 4	4 in. " "	3 6

	s. d.		
Thames Ballast	10 6	per yd.	delivered 2 miles radius Paddington.
Pit Sand	13 9	" "	
Thames Sand	14 6	" "	
Best Washed Sand	14 6	" "	
½ in. Shingle for Ferro-Concrete	12 9	" "	
¾ in. "	14 0	" "	
¾ in. Broken Brick	11 6	" "	
Pan Breeze	7 6	" "	

Per ton delivered in London area in full van loads.

Best Portland Cement. British Standard Specification. Test £2 18 0 to £3 3 6 51s. alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above	0 10 0
Super Cement (Waterproof)	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" " Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" " White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 16 9
Chalk Lime	2 16 9
Best Ground Blue Lias Lime	2 9 6
Hair per cwt.	2 2 6
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dp.

STONE.

	s. d.
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube	2 11½

PORTLAND STONE—

Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube 4 4

Do. do delivered on road wagons at above stations, per ft. cube 4 5

White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.

	s. d.
HOPTON-WOOD STONE— Delivered at any Goods Station, London.	
Random blocks from 10 ft. and over P. ft. cb.	17 0
Sawn two sides "	27 0
Sawn three or four sides "	32 0
YORK STONE, BLUE—*Robin Hood Quality.* Delivered at any Goods Station, London.	
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per ft. super	5 6
6 in. rubbed two sides, ditto "	6 0
3 in. sawn two sides slabs (random sizes) "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) "	1 6½
1½ in. to 2 in. ditto, ditto "	1 4
HARD YORK— Delivered at any Goods Station, London.	
Scappled random blocks Per ft. cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) Per ft. super	5 1½
6 in. rubbed two sides, ditto "	6 1½
4 in. sawn two sides slabs (random sizes) "	2 10
3 in. ditto ditto "	2 1½
2 in. self-faced random flags Per yd. super	9 0

CAST STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 8s. 6d.; Moulded, 9s. 6d. Cills, 10s. 0d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£28 0	3 × 6	£21 0
4 × 9	25 0	3 × 11	25 0
4 × 8	24 0	2 × 11	25 0
4 × 7	23 0	3 × 9	24 0
3 × 8	21 0	2½ × 9	23 0
3 × 7	20 0	3 × 4½	22 0
2½ × 7	20 0	3 × 4	22 0

PLANED BOARDS.

1 × 11	£27 0	1 × 9	£26 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	20/-	1¼	31/-
¾	22/-	1½	34/-
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches.	per sq.
1	25/-	¾	16/6
1¼	31/-	¾	19/-
1½	34/-	1	24/-

MATCHING (BEST).

BATTENS.

Inches.	s. d.
¾ × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle	0 2 4

1" AND UP THICK.

	£ s. d.	£ s. d.
Dry Austrian Wainscoat, per ft. cube	0 16 0 to 0 18 0	
Dry American and /or Japanese Figured Oak, ft. cube	0 15 0 to —	
Dry American and/or Japanese Plain Oak, ft. cube	0 11 0 to 0 13 0	
Dry sq. edged Honduras Mahogany, ft. cube	0 16 0 to 0 18 0	
Dry Log cut Honduras Mahogany, ft. cube	0 18 0 to 1 1 0	
Dry Cuba Mahogany, ft. cube	1 4 0 to 1 10 0	
Dry Teak, ft. cube	0 13 0 to 0 15 0	
Dry American Whitewood, ft. cube	0 11 0 to 0 14 0	
Best Scotch glue, per cwt.	4 10 0 to —	
Liquid Glue, per cwt.	4 7 0 to 5 10 0	

SLATES.

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Delivered at London rate stations in full truckloads of not less than 4 tons.

	Per 1,000 f.o.r. London. £ s. d.
Best machine-made tiles from Broseley or Staffordshire district	5 12 6
Ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) Hand-made	0 9 6
Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

	£ s. d.
R.S. Joists, cut and fitted	12 10 0
Plain Compound Girders	14 10 0
Stanchions	16 10 0
In " Roof Work "	19 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
¼ in.	12 0 0	⅜ in. to ½ in.	10 15 0
½ in.	11 0 0	⅝ in. to 2½ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes.	Fittings.	Flanges.
Black Gas	60 %	50 %	60 %
Galvanised Gas	45 %	40 %	50 %
Blue Water	55 %	45 %	55 %
Galvanised Water	38½ %	35 %	45 %
Red Steam	50 %	40 %	50 %
Galvanised Steam	32½ %	30 %	40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/2½	11½d.	3½d.
3½ in.	1/4	1/0½	3½d.
4 in.	1/5	1/2½	3½d.
4½ in.	1/6½	1/4	4½d.
5 in.	1/9½	1/5½	5½d.

O.G. GUTTERS.

3 in.	1/7	1/3½	3½d.
3½ in.	1/7	1/3½	3½d.
4 in.	1/8½	1/4	3½d.
4½ in.	1/10½	1/6½	4½d.
5 in.	2/3	1/9½	5½d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/9½	1/2½	1/8½
2½ in. "	1/11½	1/4	2/0½
3 in. "	2/4½	1/8	2/6
3½ in. "	2/10	2/-	2/10½
4 in. "	3/3	2/4½	3/6

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6 fts. plain	2 11	2 3	2 9
2½ in. "	3 5	2 6	3 5
3 in. "	4 1	2 9	4 0½
3½ in. "	4 5½	3 5	4 8½
4 in. "	4 11½	3 9½	5 5½

L.C.C. COATED DRAIN PIPES—London Prices ex Works.

	Pipe.	Bends, stocks angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
3 in. per yd. in 9 ft. lengths	4 3	5 9	7 3
4 in. " "	6 3	8 11	9 6
5 in. " "	7 10	12 0	16 3
6 in. " "	9 6	15 0	20 9

Gasken for jointing, 38/6 per cwt.

IRON—	Per ton in London. £ s. d.	£ s. d.
Common Bars	13 0 0 to	14 10 0
Staffordshire Crown Bars—good merchant quality	14 5 0 ..	15 5 0
Staffordshire "Marked Bars"	16 5 0 ..	17 5 0
Mild Steel Bars	10 0 0 ..	11 0 0
Steel Bars, Ferro-Concrete quality, basis price	10 0 0 ..	11 0 0
Hoop iron, basis price	12 0 0 ..	13 0 0
" Galvanised	27 0 0 ..	28 0 0
Soft Steel Sheets, Black—		
Ordinary sizes to 20 g.	13 5 0 ..	14 5 0
" " " 24 g.	14 5 0 ..	15 5 0
" " " 26 g.	16 5 0 ..	17 5 0
Sheets Flat Best Soft Steel, C.R. & C.A. quality—		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	15 10 0 ..	16 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	16 10 0 ..	17 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	18 10 0 ..	20 10 0
No. 1 quality £4 per ton extra.		
Flat and Galvanised Corrugated Sheets—		
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	18 10 0 ..	19 10 0
Ordinary sizes. 6 ft. to 9 ft. to 22 g. and 24 g.	19 0 0 ..	20 0 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	22 0 0 ..	23 0 0
Sheets Galvanised Flat. Best quality—		
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	22 0 0 ..	23 0 0
Best Soft Steel Sheets, 22 g. and 24 g.	24 0 0 ..	26 0 0
Best Soft Steel Sheets, 26 g.	25 10 0 ..	26 10 0
Cut Nails, 3 in. to 6 in.	19 0 0 ..	20 0 0

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	44 0 0
Pipe in coils	45 10 0
Soil Pipe	47 10 0
Compo Pipe	48 10 0

NOTE—Country delivery, 30s. per ton extra: lots under 3 cwt., 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.

Old lead, ex London area, at Mills per ton	29 10 0	—
Do., ex country, carriage forward per ton	30 10 0	—

COPPER.

	s. d.
Seamless Copper tubes (basis) per lb.	1 0½
Strong sheet "	1 0
Thin "	1 1
Copper nails "	2 3
Copper wire "	2 4

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz.

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/6	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	28/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
7/6	11/-	17/-	29/-	36/-	63/- per doz.

BRASS SLEEVES.

1¼ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.P.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

	1¼ in.	1½ in.	2 in.	3 in.	
8 lbs. P. traps	33/-	41/-	56/-	101/-	per doz.
8 lbs. S. traps	35/-	45/-	66/-	126/-	"

TIN—English Ingots, 2/10 per lb. SOLDER—Plumbers' 1/2, Tinmen's 1/5. Blowpipe 1/6 per lb.

PAINTS, &c.

		£ s. d.
Raw Linseed Oil,	in pipes per gallon	0 3 1
" " "	in barrels "	0 3 3
" " "	in drums "	0 3 6
Boiled " "	in barrels "	0 3 3
" " "	in drums "	0 3 6
Turpentine	in barrels "	0 5 4
"	in drums (10 gall.) "	0 5 6
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)		53 15 0
GENUINE WHITE LEAD PAINT— "Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganswyte," "Polacco," "J." Brand and other best brands (in 14 lb. tins) not less than 5 cwt. lots per ton delivered		72 5 0
Red Lead, Dry (packages extra)	per ton	43 0 0
Best Linseed Oil Putty	per cwt.	0 15 0
Filocol	"	0 15 0
Size. XD Quality	fkn.	0 3 6

Continued on next page.

*The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (*contd.*)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths ..	3½d.	32 oz. fourths	7½d.
15 „ thirds	4½d.	32 „ thirds	9½d.
21 „ fourths ..	4½d.	Obscured Sheet, 15 oz.	3½d.
21 „ thirds	5½d.	„ 21 „	5½d.
26 „ fourths ..	6d.	Fluted 15oz. 6½d., 21oz.	9½d.
26 „ thirds	7½d.	En'lled 15oz. 5½d., 21oz.	7½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
¼ Rolled plate	4½d.
⅜ Rough rolled	5½d.
½ Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish White..	6½d.
Ditto, tinted	9d.
Rolled Sheet	6d.
White Rolled Cathedral	5½d.
Tinted do.	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

		Per Gallon. £	s.	d.
Oak Varnish.....	Outside	0	14	0
Fine ditto.....	ditto	0	16	0
Fine Copal	ditto	0	18	0
Pale Copal	ditto	1	0	0
Pale Copal Carriage	ditto	1	4	0
Best ditto.....	ditto	1	12	0
Floor Varnish	Inside	0	18	0
Fine Pale Paper.....	ditto	0	18	0
Fine Copal Cabinet	ditto	1	2	6
Fine Copal Flatting	ditto	1	0	6
Hard Drying Oak	ditto	0	18	0
Fine Hard Drying Oak.....	ditto	0	19	0
Fine Copal Varnish	ditto	1	0	0
Pale ditto	ditto	1	2	0
Best ditto	ditto	1	12	0
Best Japan Gold Size		0	12	6
Best Black Japan		0	10	6
Oak and Mahogany Stain (water).....		0	12	0
Brunswick Black.....		0	7	6
Berlin Black		0	14	6
Knotting (patent)		1	5	0
French and Brush Polish		0	17	0
Liquid Dryers in Terebine		0	9	0
Cuirass Black Enamel		0	7	0

NEW COMPANIES

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 & 117, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

C. & W. WHITELEY, LTD. (214,193). Registered June 7. Joiners, builders, contractors. Nominal capital, £3,000.

W. H. JONES & SON (HOUSING), LTD. (214,301). Registered June 11. Lockhurst-lane, Coventry. Builders and contractors, &c. Nominal capital, £2,000.

CHARLES GESSMAN, LTD. (214,222). Registered June 9. 4, South Wharf-road, Paddington, W.2. Cabinet makers, carpenters, joiners, &c. Nominal capital, £10,000.

W. & C. HANSHAW, LTD. (214,237). Registered June 9. "Denham," Beaumont-road, Wimbledon Park. Builders and contractors, &c. Nominal capital, £1,000.

T. S. COLBERT & SON, LTD. (214,236). Registered June 9. Slate merchant. Nominal capital, £3,000.

ALFRED RAWLINSON & Co., LTD. (214,537). Registered June 22.—2, St. James's-square, Manchester. Builders and contractors, &c. Nominal capital, £1,000.

G. ILLINGTON, LTD. (214,550). Registered June 22. Plumbers, plumbing engineers, &c. Nominal capital, £2,000.

MUNRO (LONDON), LTD. (214,503). Registered June 21. 21, George-street, Portman-square, W.1. Builder, decorative specialist and contractor. Nominal capital, £100.

GLADWYNS, LTD. (214,526). Registered June 21. 33, Duke-street, St. James's, S.W. Builders and building contractors, &c. Nominal capital, £1,000.

LAWTONS' (TILERIES), LTD. (214,501). Registered June 21. The Art Tileries, Tunstall, Stoke-on-Trent. Manufacturers of and dealers in tiles of all kinds. Nominal capital, £12,000.

DAW LUCK & Co., LTD. (214,497). Registered June 21. 11, Salisbury-square, E.C.4. Builder and contractor. Nominal capital, £1,000.

H. B. WILLCOCK & Co., LTD. (214,397). Registered June 16. 24, Darlington-street, Wolverhampton. Builders and contractors, &c. Nominal capital, £100.

THE SCOTTISH BUILDER

NEW BUILDINGS IN SCOTLAND

Edinburgh.—VARIOUS.—The Dean of Guild Court passed the following plans: Chalmers Trustees, extension of Chalmers Hospital, Lauriston-place; Simon Keppie, six cottages at Penicuik-road, Liberton; W. Swanson and others, 33 houses at Boswall-drive and crescent and Grierson-gardens; Edinburgh Hippodrome, Ltd., hall and 12 shops at Annandale-street; and D. M'Gechin Duncan, 16 houses at Glebe-road, Corstorphine.

Cumnock.—HOUSES.—The Town Council has agreed to build 52 additional houses on the housing site.

East Lothian.—IMPROVEMENTS.—The East Lothian Standing Joint Committee has approved of tenders for the erection of a new police station at Prestonpans, at a total approximate cost of £2,748. The meeting also agreed to considerable extensions and improvements to Tranent police station.

Neilston.—HOUSES.—The Bleachers' Association (Ltd.), Manchester, have laid before the District Committee of Upper Renfrewshire a scheme for the erection by them through a public utility society, registered under the name of The Bleachers' Association Garden Villages (Ltd.), of 56 houses, with playing grounds, bowling greens and tennis courts, in connection with the work of James M'Haffie & Son (Ltd.), Neilston.

Lossiemouth.—HOUSING.—The Housing Secretary of the Scottish Board of Health, and Mr. G. D. Macniven, the Board's principal architect, held a public inquiry in connection with the application by the Town Council for confirmation of the compulsory order taken out by them recently to acquire ground on the Coulard Hill for the erection of 16 workmen's houses of four rooms each.

Greenock.—HOSPITAL.—A donation of £500 is to be given by Greenock Corporation towards the new auxiliary hospital which is to be erected at the Inverkip-road as an extension to Greenock Royal Infirmary.

Saltcoats.—HOUSES.—The Town Council has resolved to proceed with the erection of 18 houses to complete the Jack's-road scheme.

Fowlis-Wester.—RESTORATION.—The restoration of the pre-Reformation church of Fowlis-Wester, near Crieff, is being proposed at a cost of between £3,000 and £4,000.

Obituary.

The death has occurred of Mr. John Henderson, late of Messrs. Ferguson & Anderson, builders,

Proposed Hall for Ballinluig.

The question of erecting a public hall to serve for Mid Atholl at Ballinluig has again been under consideration. At a public meeting at Ballinluig, at which the Duke of Atholl presided, the committee recommended a steel building at a cost of £2,395, as against a brick building at a cost of £2,540, but this recommendation was defeated by 143 votes to 64.

Washing of Buildings.

Dr. A. P. Laurie writes to *The Times* as follows: "Two things, the hot dry weather and the number of new buildings erected in Central London during the last few years, urge me to write to you, advising the hosing down of these buildings during hot weather. They should be hosed three or four times with intervals of two or three days between. Not only will this treatment do much to keep the stone white, but in my opinion it will also do much to preserve it from decay. These buildings are very largely built of Portland stone, and an excellent example of the advantage of washing down Portland stone is to be seen in the Goldsmiths' Hall. Especially should the hose be applied under cornices and overhanging portions. The owners of these buildings should begin at once, while the buildings are young, the excellent habit of a yearly bath."

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Bricklayers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers—Masons', Bricklayers', Plasterers'.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/7	10½d. to 1/1
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3
Alexandria.....	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coatbridge.....	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dumfries	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Hawick	1/7	1/7	1/7	1/7-1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½
Inverness	1/5	—	1/5	1/4	1/5	1/5	1/4	1/- to 1/2
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Kirkcaldy	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Kirkwall.....	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/-
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/0 to 1/3
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Motherwell.....	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3
Stirling	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Stirlingshire (Eastern District)	1/8-1/10	1/8 1/10	1/8	1/9	1/7	1/8	1/6½	1/3½
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 146.

CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	" "	1	0
Add for every additional depth of 6 ft.	" "	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0

CONCRETOR.

		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	32	0
Add if in underpinning in short lengths	" "	7	0
Add if in floors 6 in. thick	" "	3	3
Add if in beams	" "	3	9
Add if aggregate 1 : 2 : 4	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	" "	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—

Fair external in half brick rings	" "	0	0	10
Axed in stocks	" "	0	1	9
Rubbed and gauged jointed in putty camber or segmental	" "	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	" "	8	6
¾ inch on flats in two thicknesses	" "	6	3
Angel fillet	per foot run	0	3
Skirting and fillet 6 in. high	" "	1	2

MASON.

York stone templates fixed	per foot cube	13	0
York stone sills fixed	" "	22	0
Bath stone and all labour fixed	" "	10	6
Portland stone fixed	" "	20	0

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5	0
Do. joists	" "	5	6
Do. roofs, floors, and partitions	" "	6	0
Do. trusses	" "	8	6

		¾"	1"	1¼"	2"
Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-

		s.	d.
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.

		¾"	1"	1¼"	1½"
Deal-edges shot	per sq.		44/6	53/-	60/6
Do. tongued and grooved	"		49/-	57/6	65/-
Do. matchings	"	45/-	51/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

		s.	d.
One-and-a-half moulded sashes or casements	per foot super.	1	10
Two Do. Do. Do.	" "	2	1
Add for fitting and fixing	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size	" "	3	

DOORS.

		1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	14	0

		1"	1¼"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross-tongued	"	2d.	2d.	2d.

STAIRCASES.

	1"	1¼"	1½"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. × 1¼ in.	per ft. run	0	9
Mahogany handrail: average 3 in. × 3 in.	" "	6	0
Add if ramped	" "	11	10
Add if wreathed	" "	23	9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roof work	"	27	6

RAIN-WATER GOODS.

		3"	4"	5"	6"
Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	"	1/9	2/-	2/6	3/3
Rain-water pipes with ears	"	1/9	2/7	—	—
Extra for shoes and bends	each	4/4	5/11	—	—
Do. stopped ends	"	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	"	2/2	2/7	3/10	4/3

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	58	0
Do. Do. in flats	"	57	0
Extra labour and solder in coated cesspools	each	6	9
Welf joint	per ft. run	0	6
Soldered seam	" "	1	6
Copper nailing	" "	0	6

		½"	¾"	1"	1½"	2"	4"
Drawn lead waste	per ft. run	1/2	1/9	2/-	3/4	4/-	—
Do. service	"	1/8	2/2	2/7	3/10	—	—
Do. soil	"	—	—	—	—	—	6/9
Bends in lead pipe	each	—	—	—	—	3/3	8/2
Soldered stop ends	"	1/2	1/8	2/1	2/10	3/6	—
Red lead joints	"	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints	"	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws	"	—	—	—	14/7	19/6	—
Bib cocks and joints	"	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints	"	15/4	17/2	25/8	64/-	—	—

PLASTERER.

		s.	d.
Render, float and set in lime and hair	per yard sup.	2	4
Do. Do. Sirapite	" "	2	7
Do. Do. Keen's	" "	3	7
Add sawn lathing	" "	1	7
Add metal lathing	" "	2	6
(Not including hangers or runners, &c., for suspended ceilings.)			
Portland cement screed	per yard sup.	2	2
Do. plain face	" "	3	3
Mouldings in plaster	per 1 girth	0	1½
One-and-a-half granolithic pavings	per yard sup.	5	9

GLAZIER.

		s.	d.
21 oz. sheet plain	per foot sup.	0	8½
26 oz. Do.	" "	1	0
Obscured sheet	" "	1	1
⅛ in. rolled plate	" "	0	9
¼ in. rough rolled or cast plate	" "	0	10½
¼ in. wired cast plate	" "	1	4

PAINTER.

		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	" "	0	7
Plain painting, 1 coat	" "	0	9
Do. 2 coats	" "	1	2
Do. 3 coats	" "	1	9
Do. 4 coats	" "	2	4
Graining	" "	2	3
Varnishing twice	" "	1	9
Sizing	" "	0	3
Flatting	" "	0	7
Enamel	" "	1	1
Wax polishing	per foot sup.	0	6
French polishing	" "	1	2
Preparing for and hanging paper	per piece, 2/- to 4/-		

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10 % on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TENDERS.

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted*. † Denotes *provisionally accepted*.
‡ Denotes *recommended for acceptance*.
§ Denotes *accepted subject to modification*.

BARHAM.—Six houses for the Bosmere and Claydon R.D.C. :—
*H. Taylor, Debenham £2,404 10 6

BOLTON.—Electricity sub-station at Deane Church-lane, for the T.C. :—
*R. J. Tyson.

BRIERLEY HILL.—Painting 25 houses on the Mill-street estate, for the U.D.C. Mr. J. Yorke, surveyor :—
*R. Brookes, Stourbridge £127 10

CALVERLEY (YORKS).—Twelve houses on the Brookfield estate, for the U.D.C. :—
*W. J. & R. Turnbull..... each £448

CARRICKFERGUS.—Clubhouse and greenkeeper's residence at North-road, for the Golf Club :—
J. Miskimmin & Sons, Ltd., Belfast £1,400 0
J. Roy & Co., Greenisland..... 1,337 2
Harding & Harding, Belfast 1,285 0
McGookin Bros., Carrickfergus 1,193 10
*J. Laverty, Whitehead 1,121 0

CHIPPING SODBURY.—Houses, for the R.D.C. :—
Acton Turville—
*A. Ayliffe—four £1,700
Pucklechurch—
*Hembrough & Sons—four 1,670
Stoke Gifford—
*E. R. M. Ford—four 1,580
Wick—
*H. Williams—six 2,388
Westerleigh, for Frampton Cotterell parish—
*J. H. Pimm—four 1,610
Frenchay—
*E. R. M. Ford—four 1,580
Westerleigh (Nibley site)—
*T. H. Pimm—16 for Yate, eight for Iron Acton, four for Chipping Sodbury.

CROYDON.—Sub-station building and boundary wall in Bingham-road, for the C.B. :—
Maides Bros. £319 0
E. J. Saunders 307 0
E. H. Smith 283 12
Truett & Steel, Ltd. 283 0
*D. Waller 269 10
(All of Croydon.)

CROYDON.—Painting works at the Borough Hospital, for the C.B. :—
*R. Mansell, Croydon £375

CROYDON.—Sub-station at Orleans-road, for the C.B. :—
*D. Waller, Croydon..... £249

CROYDON.—Painting works at the Municipal Lodging House, for the C.B. :—
*G. E. Everitt & Sons £128 18 6

CROYDON.—Sub-station building in Silverleigh-road, Thornton Heath, for the C.B. :—
E. H. Smith £259 0
E. J. Saunders 258 10
*D. Waller 241 0
Truett & Steel, Ltd..... 238 10
(All of Croydon.)

CROYDON.—Internal distempering, painting and varnishing at schools, for the C.B. :—
Central Polytechnic and John Ruskin school—
*G. E. Everitt & Sons, Ltd..... £383 0
Christ Church school—
*G. E. Everitt & Sons, Ltd..... 114 0
St. Mary's school—
*R. Mansell 115 0
St. Andrew's school—
*Baldwin & Sons (Croydon), Ltd..... 140 10
(All of Croydon.)

DEPWADE.—Eight cottages at Harleston, for the R.D.C. Mr. S. J. Wearing, F.R.I.B.A., architect, 3, Redwell-street, Norwich :—
Evans & Son, Norwich..... £4,096
*H. Blackburn, Harleston..... 3,660

DORCHESTER.—Fifty-two parlour houses at Victoria Park, for the T.C. :—
‡H. E. Tilt.

DOWNHAM MARKET.—Six pairs of houses at Paradise-road, for the U.D.C. :—
*J. J. Capp & W. Baker, Downham.

DUBLIN.—Boundary wall, piers, and railing at the Christian Brothers' Schools, Fairview, for the C.B. :—
*Clifton & Cooper £1,364

DUMFRIES.—Structural works in connection with extension of Lochmaben Sanatorium, for the Dumfries and Galloway Joint Sanatorium Board :—
**Excavator, Brick, &c.*—A. Stuart, Glasgow.
**Carpenter, Joiner, Glazier and Ironmonger*—Lockerbie & Waugh, Dumfries.
**Slater*—J. Gibson, Lochmaben.
**Plaster Work, Concrete Floors, and Roughcasting*—J. Laidlaw & Son, Lockerbie.
**Plumber*—P. & P. Meechan, Dumfries.

DUNGANNON.—150 cottages in various parts of the rural district, for the R.D.C. :—
*S. Cummings, Coole, Coalisland—
2 at Tullyvannon ..... each £317 0
14 at Stangmore ..... „ 333 0
9 at Moygashel ..... „ 286 0
20 at Dungannon ..... „ 333 0
24 at Drumreany ..... „ 289 0
1 at Logane ..... „ 345 0
22 at Brackaville ..... „ 305 0
20 at Gortgonis ..... „ 309 0
8 at Annaghbeg ..... „ 297 0
5 at Laghey ..... „ 287 0
1 at Cavanbuoy ..... „ 333 0
*W. Collen, Ballyknock, Tandragee—
26 at Caledon ..... „ 274 5
*P. M'Kenna, Castlecaulfield—
1 at Drisdernan ..... „ 333 10

DUNSTON.—Staff lavatory accommodation at the Infants' Council school, for the Durham County E.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet, Durham :—
‡Nordmann & Sons, Dunston-on-Tyne.. £120

DURHAM.—Building new chimney shaft, altering flues and fixing stoves, &c., at St. John's Chapel Council school, for the County E.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet :—
‡T. Lee & Sons, Westgate..... £225

EASINGTON.—Erection of the Easington-lane new Council school, for the Durham County E.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet, Durham :—
‡J. M. Gibbons & Son, Sunderland £23,096 1 5

EAST HAM.—Dressing-rooms at the Gooseleys Playing Fields, for the B.C. :—
†Wood & Sons £479 17 1

EAST PRESTON.—Eight cottages at Clapham, for the R.D.C. :—
*Miles & Jeffries, Durrington..... £4,136

EPSOM.—Structural steelwork in a stand at Epsom, 700 ft. long :—
*Heenan & Froude, Manchester.

FARINGDON.—New Council school for 203 girls, for the Berkshire E.C. Mr. W. C. F. Anderson, Education Secretary, Shire Hall, Reading :—
Norris & Co., Sunningdale..... £3,624 0 0
Bartlett Bros., Witney 3,610 0 0
Archer & Sons, Northampton .. 3,607 0 0
P. Chick, Highworth 3,598 14 2
Boshers, Ltd., Cholsey 3,588 0 0
G. W. King, Lechlade 3,470 0 0
Cadel Bros., Faringdon 3,424 0 0
Tydeman Bros., Swindon 3,4 0 0 0
Wheeler & Co., Wantage 3,346 4 6
Blake Bros., Didcot 3,340 6 6
*The Building & Public Works Construction Co., Ltd., Swindon 3,213 14 0

FINDON.—Widening the County bridge, for the Northants C.C. :—
*C. R. Pettit & Son, Thrapston..... £4,520

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GALWAY.—Improvements to the harbour-master's house at the New Docks, for the Harbour Board :—
W. Simon..... £245
*J. Griffin 185

HANWELL.—Repairs to destructor chimney, for the U.D.C. :—
‡J. Smith, Rochdale..... £120

HANWELL.—Shelters at Churchfields recreation ground, for the U.D.C. :—
Davis & Co..... £209 6 8
‡J. H. Ward 194 0 0

HITCHIN.—Seventy cottages at West Mill-lane estate, for the U.D.C. Messrs. Culpin & Bowers, 3, Portsmouth-street, Lincoln's Inn, London, architects; Mr. A. T. Blood, Surveyor to Council :—
Kempster & Williams, Watford £45,835 0 0
Hawkes & Son, Chelmsford..... 43,857 0 0
Miskin & Son, St. Albans..... 4 ,735 0 0
Willmott & Sons, Hitchin 36,782 0 0
F. Newton, Hitchin 35,736 0 0
Jeffs & Bigley, Letchworth .. 35,646 0 0
Foster & Co., Hitchin 35,385 0 0
Bennett Bros., Letchworth..... 34,570 0 0
Jno. Ray, Letchworth..... 34,382 0 0
H. King, Garston ..... 32,9?2 0 0
Abdon Clee Stone Co., Bridgnorth 32,653 0 0
Pettengell & Clark, Hitchin .. 32,484 0 0
A. Carter, Luton 31,535 0 0
*S. H. Palmer, Hitchin 31,165 0 0

HOLBEACH.—Houses, for the U.D.C. :—
*J. Parsons..... 3 pairs £862 10 per pair
*Baker & Noble.. 2 pairs 850 0 „
*— Bantam .... 2 pairs 845 0 „

HORSHAM ST. FAITHS.—Eight houses, for the R.D.C. Messrs. A. F. Scott & Sons, FF.R.I.B.A., architects :—
S. Smith, Wroxham..... £3,53) 0 0
R. G. Carter, Drayton 3,440 0 0
Collison Bros., Reepham.... 3,377 0 0
*Norgate & Son, Horstead .. 3,196 8 6
Stringer & Son, Wroxham .. 3,100 0 0

IRELAND.—Tenders accepted for June by the Commissioners of Public Works :—
Ballinamult Garda Siochana Station, Co. Waterford (restoration)—J. McGrath, Dungarvan.
Bennettsbridge Garda Siochana Station, Co. Kilkenny (restoration)—M. Baillie, Waterfo d.
Farranfore Garda Siochana Station, Co. Kerry (restoration)—J. Clifford, Ballymullen, Tralee.
Morris Mills Garda Siochana Station, Co. Clare (restoration)—Sean MacConmara, Parkgorm, Crusheen, Co. Clare.
Oulart Garda Siochana Station, Co. Wexford (restoration)—J. Bolger, Ballyvoodrane, Blackwater, Enniscorthy, Co. Wexford.
Stradone Garda Siochana Station, Co. Cavan (restoration)—D. Murphy, Clones.
Skibbereen Garda Siochana Station, Co. Cork (restoration)—R. Buckley, Cobh.
Butter Testing Station, Harcourt-terrace, Dublin (installation of heating and electrical plant, &c.)—Hadens Engineering Co., Ltd., Dublin.
Custom House, Dublin (roofing of northern front)—J. & P. Good, Ltd., Dublin.
LEEDS.—Painting of premises, for Messrs. Hayward's, Ltd., Swan-street :—
*Wm. Gott.

LEEDS.—Cafe, shops and ballroom at Cross Flatts, Dewsbury-road :—
**Builder and Joiner*—Chas. Higgins.
**Slater*—J. Season.
**Plumbers*—Morrish & Roberts.
**Plasterers*—Geo. Dobson.
**Painters*—Roylance & Horsman.

LEEDS.—Supplying and fixing of fencing and gate for the Moortown Reservoir, for the T.C. :—
*Bayliss, Jones & Bayliss £315 16

LEEDS.—Transformer sub-station at Kimberley-road, Harehills, for the T.C. :—
*S. J. Flockton £410

LEEDS.—Transformer sub-station at Tinshill-road, for the T.C. :—
*J. Ferguson & Son, Ltd. £414 17

LESLIE.—Two blocks of four houses at South-street, for the T.C. Mr. A. D. Haxton, architect, Leven :—
**Builders*—Wm. Dewar & Son, Leslie.
**Joiner*—R. Wood, Thornton.
**Plumber*—R. Ritchie, Leslie.
**Plasterer*—A. B. Ferguson, Leslie.
**Slaters*—J. Lawson & Son, Kirkcaldy.
**Painters*—J. Miller & Son, Leslie.
**Glaziers*—J. Haxton & Co., Kirkcaldy.
**Fencer*—G. Henderson, Windygates.

LETTERKENNY.—Four houses, for the U.D.C. :—
*J. Johnson..... £1,984

LONDON.—Painting at Finch-street, Whitechapel, bathing centre, for the L.C.C. :—
A. E. Clark..... £447
Samuel Blow, Ltd..... 353
J. J. Woollaston..... 326
Turnbull & Son 314
*G. Butters 289
(All of London.)

LONDON.—Repairs, painting and other work required at public gardens, for the Islington B.C. :—
Stevens & Sons £1,266
J. C. Mather 1,103
‡Randall & Son 870
(All of London.)

LONDON.—Painting at Littleton-street school, Wandsworth, for the L.C.C. :—

Curd Bros.	£550
F. Jones	549
H. S. Lee, Ltd.	502
Holliday & Greenwood, Ltd.	494
Chappell Bros.	490
F. J. Rashbrook, Ltd.	470
W. Hammond	468
*White & Johnson	375
The architect's comparable estimate..	469

(All of London.)

LONDON.—Painting at Webber-street school, Southwark, for the L.C.C. :—

W. S. Barton & Co.	£503 0 0
Bostels, Ltd.	445 0 0
Turnbull & Son	428 0 0
Sims & Russell	415 0 0
Chappell Bros.	370 0 0
Thomas Carr	349 0 0
A. Logan	326 0 0
H. W. Spinks	221 10 0
*E. C. Sames & Co.	210 0 6
The architect's comparable estimate	307 0 0

(All of London.)

LONDON.—Painting at Wycliffe school, Battersea, for the L.C.C. :—

F. Jones	£559 0 0
Sims & Russell	527 0 0
H. S. Lee, Ltd.	518 0 0
Holliday & Greenwood, Ltd.	506 0 0
W. Hammond	481 0 0
Chappell Bros.	456 0 0
*C. & R. Harding	383 2 2
The architect's comparable estimate	440 0 0

(All of London.)

LONDON.—Painting at Brovingdon-road school, Paddington, for the L.C.C. :—

G. N. Watts, Ltd.	£398 19 0
F. W. Young & Son	372 0 9
Bevis & Sons	360 7 6
W. Hussey	319 0 0
J. P. Williams, Ltd.	310 0 0
W. J. Marston & Son	307 3 0
*C. Berger	303 0 0
The architect's comparable estimate	309 0 0

(All of London.)

LONDON.—Central school at Sprules-road, Deptford, for the L.C.C. :—

W. Lawrence & Son, Ltd.	£40,328
G. Godson & Sons, Ltd.	40,305
W. Downs, Ltd	40,103
Patman & Fotheringham, Ltd.	39,906
W. H. Gaze & Sons, Ltd.	39,777
A. Monk	39,690
Thomas & Edge	39,519
T. D. Leng	39,156
Higgs & Hill, Ltd.	38,970
Griggs & Son	38,584
J. & C. Bowyer, Ltd.	37,334
Leslie & Co., Ltd.	37,239
Bovis, Ltd.	36,666
‡Galbraith Bros., Ltd.	35,950

(All of London.)

LONDON.—Painting at Brook Green school, Hammersmith, for the L.C.C. :—

F. W. Young & Son	£358 7 11
C. Berger	300 5 0
*Butler & Wiles	239 0 0
The architect's comparable estimate	284 0 0

(All of London.)

LONDON.—Picture rails in the living-room and best bedroom in each of the flats at Laycock Mansions, for the Islington B.C. :—

John C. Mather	£509 0
George Bennett	508 4
Yeomans & Richardson	412 10
Allen Fairhead & Sons	332 5
‡J. Johnson	264 0

(All of London.)

LONDON.—Structural work for the new central school for boys and girls at Sprules-road, Deptford, for the L.C.C. :—

W. Lawrence & Son, Ltd.	£40,328
G. Godson & Sons, Ltd.	40,305
W. Downs, Ltd.	40,103
Patman & Fotheringham, Ltd.	39,906
W. H. Gaze & Sons, Ltd.	39,777
A. Monk	39,690
Thomas & Edge	39,519
T. D. Leng	39,156
Higgs & Hill, Ltd.	38,970
Griggs & Son	38,584
J. & C. Bowyer, Ltd.	37,334
Leslie & Co., Ltd.	37,239
Bovis, Ltd.	36,666
‡Galbraith Bros., Ltd.	35,950
Architect's comparable estimate	36,300

(All of London.)

LONDON.—Monolithic concrete decking at the Lots-road wharf, for the Kensington B.C. :—

Industrial Constructions, Ltd.	£1,858
Peter Lind & Co.	1,390
Saxild & Partners	1,250
F. Bradford & Co.	1,240
K. Holst & Co.	1,230
‡Johnson's Reinforced Concrete Engineering Co., Ltd.	1,153

LONDON.—Repairs to the West tea room at Hainault Forest, for the L.C.C. :—

*W. Radley	£123 18

LOOE (CORNWALL).—Public convenience at the Guildhall, East Looe, for the U.D.C. Mr. G. H. Ivory, surveyor :—

C. Symons, Liskeard	£869
T. Angear, Looe	785
*E. Moore & Son, Looe	754

LUTON.—Twelve houses at Houghton Regis, for the R.D.C. Mr. H. Pickering, surveyor, 73, West Parade, Dunstable :—

A. Carter, Luton	£5,630
Luton Building Co.	5,010
W. Summerfield, Dunstable	5,000
A. & E. Fensome, Leagrave	4,993
*B. W. Wood, Dunstable	4,926

LUTON.—Twenty-six houses at Leagrave, for the R.D.C. Messrs. Manning & Steel, architects, George-street, West Luton :—

A. Carter, Luton	£14,030
C. H. White, Luton	12,922
A. & E. Fensome, Leagrave	12,811
J. Frost, Luton	12,774
Seaward Bros., Limbury	12,488
Luton Building Co., Luton	12,187
*F. J. W. Janes, Ltd., Luton	12,060

MANSFIELD.—Sub-station on the Reindeer housing estate, for the T.C. :—
*H. James.

METHIL.—New institute, for the Miners' Welfare Fund, Fife, Clackmannan, Kinross, and Sutherland district. Mr. A. D. Haxton, Lic.R.I.B.A., 3, High-street, Leven :—
Builders—A. McRuvie & Son, Leven.
**Joiner*—R. Galloway, Methil.
**Plumbers*—Wm. Nicol & Sons, Ltd., Buckhaven.
**Plasterers*—J. Knox & Son, Leven.
**Slaters*—J. Lawson & Son, Kirkcaldy.
**Tilers*—Allan & Sons, Edinburgh.
**Blacksmiths*—W. B. Wardlaw & Son, Windygates.

MOFFAT.—Additions to the Academy, for the Dumfries-shire C.C. Mr. J. R. Hill, architect and surveyor, Education Offices, Dumfries :—

Excavator and bricklayer—	
*J. G. Hope, Lockerbie	£907 3 9
Carpenter and joiner—	
*R. J. Aitchison, Lockerbie	883 15 10
Slater—	
*J. Gibson, Lochmaben	121 12 5
Plumber, drainer and gasfitter—	
*P. Drummond & Son, Dumfries	459 13 3
Cement and plaster—	
*J. G. Hope, Lockerbie	283 14 9
Glazier and painter—	
*J. Cullen, Sanquhar	101 12 0
Steel casements—	
*Williams, Gamon & Co., Chester	226 13 0
Heating—	
*J. L. Saunders & Co., Glasgow	256 15 9

NEWTON ABBOT.—Strengthening the retaining wall of the River Lemon and cementing the bed, for the U.D.C. :—

*Hugh Mills	£2,580 13

NORTHAMPTON.—Repairs, &c., for the E.C. :—

Converting playsheds into handicraft and science centres, Kingsthorpe-grove school—	
*Beardsmore & West	£1,150 0
Repair and renewal heating apparatus, Barry-road school—	
*S. Booth Horrocks	630 14
Electric lighting, Vernon-terrace school—	
*J. T. Lowke, Ltd.	255 10

OSSETT.—Houses on the Leeds-road housing estate, for T.C. :—

Brickwork—	
*A. Tolson & Sons	£481 14 6
Joiners—	
*J. H. Horsnell	241 18 0

OUTWELL.—Church hall, for the Rector and Wardens. Mr. J. W. Crouch, architect and surveyor, Post Office-lane, Wisbech :—

Boulton & Paul, Ltd., Norwich	£960 0 0
Wm. Harbrow, Ltd., London	825 0 0
W. H. Cox, Outwell	626 10 0
Elworthy & Co., Upwell	595 0 0
Foster & Sons, Wisbech	595 0 0
*J. T. Shepherd, Outwell	544 5 6

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OXFORD.—For (*a*) new Dutch barn at Blackbird Leys Farm, and (*b*) repairs and painting at Minchery Farm, for the T.C. :—

(*a*) *Curtis & Horn	£145 5
(*b*) *J. H. Tucker	145 2

OXFORD.—Seventy-six houses on the Weir-lane South site, for the T.C. :—
*W. H. Jones & Son (Housing), Ltd. £459 each

PONTEFRACT.—Primitive Methodist Sunday schools in Micklegate :—
*Barber & Heseltine.

READING.—Repairs, &c., at the Infirmary, for the B.G. :—
*Collier & Catley, £5,826 (conversion of old laundry buildings into a power house, the formation of subways and other building works).
*Poulton & Son, £1,784 (boiler settings for the economiser house, 120 ft. chimney shaft, &c.)
*Cash & Co., £8,239 10s. (boiler installations, heating, and hot-water mains, &c.).

ROMFORD.—Additional accommodation at the Institution, for the B.G. Messrs. Harrington & Evans, architects, 10, High-street :—

Myall Bros., Ilford	£465
W. H. C. Heath & Son, Seven Kings	348
*Finch & Sons (Ilford), Ltd., Ilford	325

RUISLIP-NORTHWOOD.—Pair of houses, for the U.D.C. :—
*J. Whittle £1,000

RUSHDEN.—Houses on the Irchester-road site, for the U.D.C. :—

Six houses—	
*Packwood & Son	£2,649 0
Four houses—	
*R. Marriott	1,760 0
Eight houses—	
*R. Marriott	3,943 10
Ten houses—	
*W. Thompson & Sons	4,803 10
Eight houses—	
*W. Thompson & Sons	3,783 10

SACRISTON.—Extensions and alterations to the Council school, for the Durham County E.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet, Durham :—
‡H. M. Nowell, Stockton-on-Tees £2,[illegible]52

ST. ALBANS.—Six houses at Leverstock Green for the R.D.C. :—
*Arthur Cole, Ltd. £2,900

ST. ALBANS.—Nineteen cottages at Hill End Sanatorium, for the Herts C.C. :—
*G. Whitby, St. Albans £8,552

ST. HELENS.—Painting and decorating of various rooms and corridors at the Town Hall, for the C.B. Mr. A. W. Bradley, Borough and Water Engineer :—
*R. Friar, St. Helens.

SHEFFIELD.—Cleaning, painting, distempering, &c., to playgrounds required to be done at certain Council schools and education offices, Leopold-street, for the E.C. Mr. W. G. Davies, A.R.I.B.A., City Architect :—
Painting, &c.—
F. A. Tinker & Sons.
C. T. Tyler.
A. Douthwaite.
Smiths Ltd.
Flint Bros.
J. Puttrell & Sons.
W. J. Wollerton.
Bodsworth Bros.
J. Fletcher.
S. Smith.
(All of Sheffield.)

SLEAFORD.—Thirty-eight non-parlour type workmen's cottages at the Drove, for the U.D.C. Mr. W. H. Maxey, architect, 41, Eastgate :—
*Wallhead Bros., Ruskington, Sleaford £13,395

SOLIHULL.—Reconstruction of three bridges at Temple Balsall, Balsall, for the R.D.C. Mr. A. E. Currall, surveyor, Streetsbrook-road :—

Jevons & Co.	£3,327
Muirhead & Co.	3,323
Coxhead & Co., Birmingham	2,873
Trentham, Birmingham	2,638
Langley	2,279
*A. E. Farr, London	2,21[illegible]

SOUTH MIMMS.—Construction of a reinforced concrete culvert under Baker-street, Potters Bar, approximate length 75 ft., for the R.D.C. Mr. G. Simcox, surveyor, Cooper's-lane, Potters Bar :—

Peter Lind & Co., London	£720 0
Earlsfield Construction Co., London	709 0
London County Public Works, Ltd., London	368 0
Hicks & Reid, Potters Bar	348 0
Turner & Co., London	319 0
†A. M. Turner, London	308 10

SPRINGWELL.—Alterations and improvements to the heating apparatus, for the Durham County E.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet, Durham :—
‡T. A. Taylor, Chester-le-Street £214 11

STOCKTON-ON-TEES.—Conversion of approximately 600 privy middens and pan closets into water closets in the Norton Ward, for the T.C. Borough Engineer, Victoria Buildings :—
‡G. Fordy, Stockton-on-Tees £4,535 6

STRETFORD.—Greenhouse at the Cemetery, for the U.D.C. :—
*Archer & McAlpin £200

SWANSEA.—Installation of electric light wiring and fitting at (*a*) Terrace-road Council school, and (*b*) Manselton Council school, for the E.C. Mr. E. E. Morgan, A.R.I.B.A., architect, 3, Prospect-place :—
(*A*)
T. Ventura, Swansea £265
(*B*)
J. Eade & Son, Skewen £339 16

TIVERTON.—Convenience in the Westexe Recreation Ground, for the T.C. Borough Surveyor:—

*Bamsey & Marshall, Tiverton.....	£287 10

TYNEMOUTH.—Coast road scheme, for Joint Committee:—

Construction of steel bridge—

*Sir Wm. Arrol & Co., Ltd...	£23,826 19 6

Completion of road—

*Chas. L. Warren	62,662 18 4

WALPOLE ST. ANDREWS.—House, for Mr. C. W. Large. Mr. J. W. Crouch, architect and surveyor, Post Office-lane, Wisbech:—

Ringwood Bros., Stow, Lynn....	£800 0 0
White & Holmes, Wisbech	725 15 0
R. Lewis, Tilney.....	649 11 9
*J. Harrison, Walpole Highway..	615 17 9

WARE.—Repairs and decorations to the Girls' Grammar School. Mr. A. Gray, architect, 64, Duncombe-road, Hertford:—

Crook Bros., Ware	£170 0 0
C. Pole, Hertford.....	167 0 0
H. C. Suckling, Ware	147 15 0
*Bowyer & Burgess, Ware.....	141 11 6

WARWICK.—Ten parlour type and one non-parlour type houses in All Saints'-road, Emscote, for the Corporation. Messrs. F. P. Trehess & Son, architects, 1, Church-street:—

Hunt & Son, Shipston-on-Stour.....	£6,450
R. P. Gathercole, Leamington.....	5,990
*Standbridge & Parker, Leamington..	5,962

WATFORD.—Two police cottages, Whippendenroad, for the Herts C.C.:—

*A. J. Eldridge, Watford.....	£1,4[illegible]2

WESTON-SUPER-MARE.—New hospital:—

*Hayward & Wooster, Bath	£39,387

WHITLEY AND MONKSEATON.—Wiring the following houses for electric lighting, viz.: 38 living-room houses, "A" type; 28 parlour houses, "B" type, for the U.D.C. Mr. A. J. Rousell, surveyor:—

*Embleton & Baker, Ltd., Gateshead	£459 19 3

WIMBLEDON.—Second portion of the Wimbledon Park school, for the E.C.:—

*A. Monk, Edmonton.....	£13,302

WINCHESTER.—Sixty-eight houses in six parishes, for the R.D.C.:—

10 houses at Micheldever—

*F. J. Goodall & Son	£4,952 0 0

6 houses at Headbourne Worthy—

*F. J. Goodall & Son	2,983 0 0

24 houses at Twyford—

*E. H. White & Son	11,767 13 3

12 houses at Compton—

*E. H. White & Son	5,931 6 7

6 houses at Crowd Hill—

*E. H. White & Son	3,007 0 6

10 houses at Fair Oak—

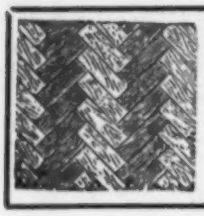
*E. H. White & Son	4,986 2 2

WOKING.—Eleven pairs of cottages at Knaphill, for the U.D.C.:—

*Cheeseman & Son	£10,494

WORTHING.—Fencing at Durrington Cemetery, for the T.C.:—

*Couper & Co.	£1,357 10 6



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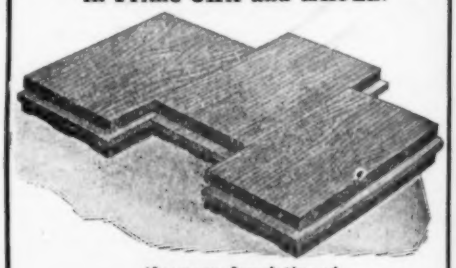
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